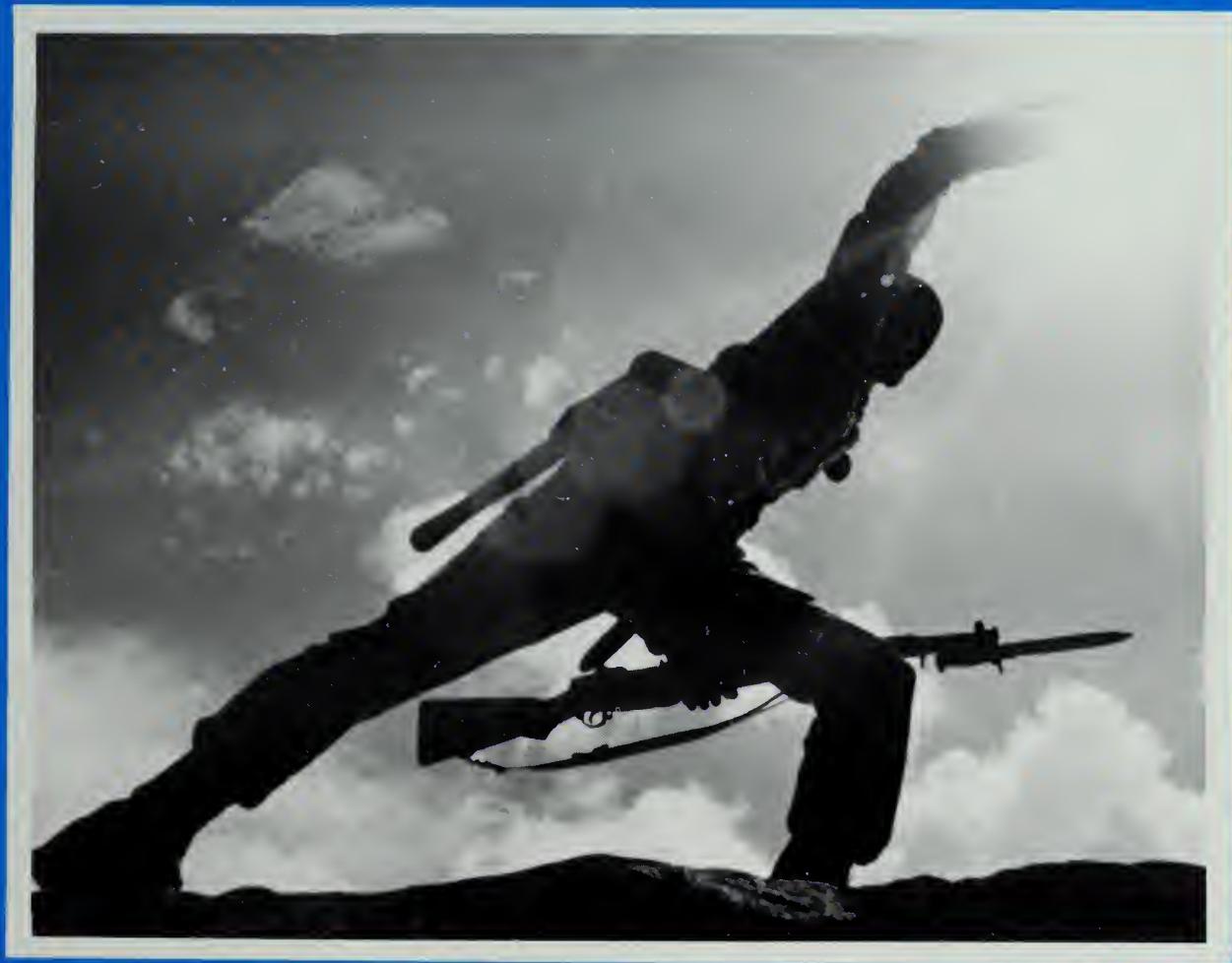


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Infantry

January-February 1990



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FLARE

PB 7-90-1

MICHAEL P. W. STONE
Secretary of the Army

MG MICHAEL F. SPIGELMIRE
Commandant, The Infantry School

ALBERT N. GARLAND
Editor, INFANTRY



This medium is approved for official dissemination of material designed to keep individuals within the Army knowledgeable of current and emerging developments within their areas of expertise for the purpose of enhancing their professional development.

By Order of the Secretary of the Army:

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General, U.S. Army
Chief of Staff

Official:

WILLIAM J. MEEHAN II
Brigadier General, U.S. Army
The Adjutant General

Distribution: Special

January-February 1990

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• INFANTRY is an Army professional bulletin prepared for bimonthly publication by the U.S. Army Infantry School at Building 1827, Fort Benning, GA. • Although it contains professional information for the Infantryman, the content does not necessarily reflect the official Army position, and it does not supersede any information presented in other official Army publications. • Unless otherwise stated, the views herein are those of the authors and not necessarily those of the Department of Defense or any element of it. • Official distribution is to infantry and infantry-related units and to appropriate staff agencies and service schools. • Direct communication concerning editorial policies and subscription rates is authorized to Editor, INFANTRY, P.O. Box 2005, Fort Benning, GA 31905-0605. • Telephone: (404) 544-4951; AUTOVON 784-4951. • Second-class postage paid at Columbus, GA, and additional mailing offices. • POSTMASTER: Send address changes to INFANTRY, P.O. Box 2005, Fort Benning, GA 31905-0605. • USPS Publication No. 370630. ISSN: 0019-9532.



Commandant's NOTE

MAJOR GENERAL MICHAEL F. SPIGELMIRE Chief of Infantry



BRADLEY PLATOON ORGANIZATION

The Army has restructured its Bradley-equipped mechanized infantry platoon. The purpose behind the restructuring was to reduce the time lost in dismounting the fire teams, to improve the fire and maneuver capability of the squads, and to align the Bradley-equipped mechanized infantry with the rest of the force.

The Army began fielding its new Bradley fighting vehicles in 1983 and, to date, about half of our mechanized infantry units are equipped with those vehicles. This fielding experience provides an excellent example of the way our infantry force matures and excels when outstanding infantrymen in the field share lessons they have learned and when the resulting techniques are disseminated throughout the world. We have also learned much from our combat training centers.

In 1988, based upon key input from the field, the Infantry School's doctrine writers prepared a white paper that addressed the doctrine, force design, leader development, and training strategies associated with Bradley-equipped mechanized infantry units. Subsequently, infantrymen in the field reviewed the paper and provided valuable comments and perspectives. The School then revised the paper and in June 1989, at the Bradley Worldwide Conference at Fort Benning, presented it to 250 subject matter experts for their scrutiny.

At the conclusion of the conference, it was obvious that the proposed organization defined by the white paper warranted formal analysis. As Chief of Infantry, I directed a study that analyzed and compared the current, documented organization with the proposed structure.

This formal study, conducted from June through September 1989, included extensive modelling and formal observations of focused rotations at the combat training centers. Additionally, infantry observation teams with Bradley experience visited appropriate major commands and conducted independent assessments. All of these

efforts were integrated and analyzed and then subjected to rigorous review by the proponent directorates within the Infantry School.

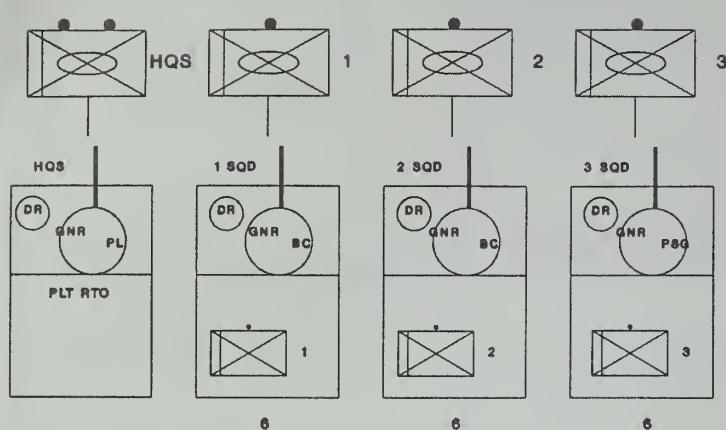
Our resulting conclusions and recommendations were then reviewed and approved by the commanders in chief of the U.S. Army Europe and the U.S. Army Forces Command, and by the commanding general of the U.S. Army Training and Doctrine Command.

This reorganization, which will be disseminated to the field for implementation in January 1990 and documented in the next submission for change of the Table of Organization and Equipment, does not require any increase in personnel or rank; it is being achieved by simply reorganizing or redefining the current Bradley squad.

The current documented organization has three squads, each consisting of a three-man mounted crew plus a six-man dismount element. When the squad is called upon to perform a dismounted mission, each of the three squad leaders dismounts and is replaced in the turret by an assistant squad leader who otherwise rides in the rear of the vehicle. Not only is considerable time lost during this "turret hopping" process, but these assistant squad leaders, when they move to the turret, must be oriented to the mounted battle so that they can support the dismounted mission. And once the squad dismounts, each of the three squad leaders controls a five-man dismount element that has no fire and maneuver capability.

The new organization addresses these deficiencies by creating two standard nine-man squads in the Bradley platoon. One of the two squad leaders is positioned in the rear of the platoon leader's fighting vehicle and the other in the platoon sergeant's vehicle. The headquarters augmentation is split between the platoon sergeant's and the platoon leader's vehicles and the remaining seats in each are filled with an infantry fire team.

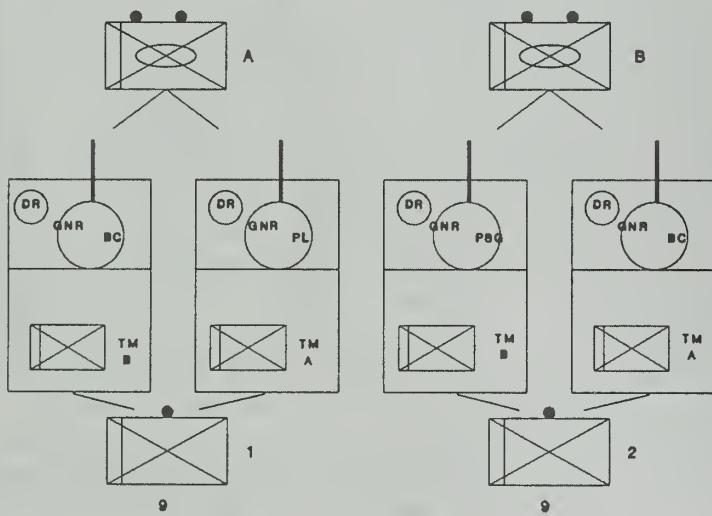
CURRENT ORGANIZATION



CHARACTERISTICS

- Plt Hqs and augmentees minus PSG on 1 BFV.
- Mounted movement: Wing pairs.
- Three 6-man dismount elements.
- Sqd Ldr responsible for training and employment of both crew and dismounted element.
- Platoon = 1 headquarters section plus 3 squads.
- Squad = squad leader + BFV + BFV crew + dismount element.

NEW ORGANIZATION



CHARACTERISTICS

- Plt Hqs and augmentees distributed on 2 BFVs.
- Mounted movement: Platoon.
- Two 9-man dismount squads.
- Sqd Ldr responsible for training and employment of dismount squad.
- Bradley Cdr responsible for training and employment of BFV crew.
- Platoon = 2 mounted sections + 2 dismount infantry squads.
- Mounted section = 2 BFVs + 2 crews.
- Squad = squad leader + 2 fire teams.

This now gives each Bradley a dismount fire team to perform security missions and gives the platoon two dismount squads that have a fire and maneuver capability. Significantly, these two squads are compatible with those of light infantry, air assault, and airborne squads.

This improvement in the Bradley dismount capability does require a modification in the manning of two of the Bradley turrets. Two new positions, called section leaders, have been established. These are staff sergeants who command the platoon leader's and the platoon sergeant's wing-man vehicles.

Thus, the new organization provides a standard platoon structure that focuses leadership for dismounted and

mounted operations or for training. This focus of leadership, with Bradley commanders in the turret and squad leaders in the dismount positions, eliminates the switching of leadership responsibilities from the back of the vehicle to the turret when the squads must execute dismounted infantry missions. This standard platoon structure also aligns the Bradley-equipped mechanized infantry with the rest of the infantry force.

I am particularly pleased that this improvement in force effectiveness came about through a dialogue between the Infantry School and the infantrymen in the field. Keep sending us those lessons learned!

INFANTRY LETTERS



AUFTRAGSTAKTIK

Lieutenant Colonel John L. Silva, in "Auftragstaktik: Its Origin and Development" (INFANTRY, September-October 1989, pages 6-9), has performed a signal service for INFANTRY readers and for the Army in general. By clearly defining *auftragstaktik* and tracing its evolution in the German army, he leads us to understand how the Germans created an atmosphere for training and warfighting in which mission orders and decentralized execution worked synergistically to achieve outstanding results.

This article is particularly apt today for several reasons. As Colonel Silva points out, AirLand Battle doctrine makes much of mission orders and mission-oriented command. Moreover, we expect operations on future battlefields to proceed at continuous high tempo with a certain compartmentalization of effort because of the resulting fluid tactical environment. Such an environment places a premium on the disciplined, focused actions of leaders at squad, platoon, and company levels, often operating in isolation from higher headquarters command, control, communications, and intelligence.

The independent actions of these small unit leaders, directed toward achieving their commander's intent, will be absolutely crucial to our success. Inculcating in these leaders the habit of independent action and an understanding that failure to act is wrong is what we seek, and it is very clearly along the lines of *auftragstaktik* as Colonel Silva describes it.

At present, however, neither FM 100-5, Operations; FM 22-102, Soldier Team Development; nor FM 25-100, Training the Force, spells out with any clarity or precision how we are to "train as we will fight" in this critical respect.

How, indeed, do we, as a Total Army, deliberately create an environment in

which we meet the Army Chief of Staff's challenge to develop confident, competent leaders—leaders who will experiment and seek better ways of accomplishing the mission, as a matter of course, especially in the absence of supervision or further instructions from higher headquarters? I submit that Colonel Silva has largely answered that question for us.

If we are to build the self-confidence that independent action requires and on which AirLand Battle is based, we really have to give junior leaders the freedom to learn from their mistakes without having their careers destroyed. If we truly accept and institutionalize the idea that "everything short of war is training," we must make every well-intentioned action by those leaders a learning experience for them—not a career-threatening one—and reinforce the learning through creative coaching. We need, as a corollary, to inculcate the precept that a failure to act is wrong, again, in line with the ethos described in the article.

I further submit that such an environment, actively and formally fostered Army-wide, will produce the kind of leaders at all levels that the Chief of Staff seeks and knows we must have to win. Maybe we won't be pretty, but we'll be a great deal more effective if we give our soldiers the environment and structure they need to capitalize on their capabilities.

JAMES L. YARRISON
LTC, Virginia Army National Guard
Springfield, Virginia

NCO WARFIGHTING CONFERENCES

While I was a rifle company commander, I scanned the battle roster and realized that a key element of experience

was missing from the ranks—combat veterans.

As the Vietnam conflict moves farther into history, the experience of combat veterans that I was fortunate enough to draw from as a young lieutenant no longer (or only rarely) exists now at platoon level. The young leaders in my company, though competent, could not honestly answer the questions the soldiers asked them about combat.

To verify my own training and to justify the adage "Train in peace as you fight in war," I actively sought out respected war veterans to fill in the gaps. Focusing on the battle analysis as a way to execute the training, I invited them to participate in quarterly NCO warfighting conferences.

The concept of the warfighting conference was not new; I had been introduced to it in a class at the Infantry School. I was impressed by the program and was convinced it was a sound idea that would work at company level.

Using the multi-echelon approach to training, I tasked out key battles to my platoon leaders for them to analyze as part of our officer professional development program. The battles were chosen for their significance in history and for the way they related to the unit's history or its mission essential tasks.

The Battle of the Bulge, Anzio, Market Garden, Inchon, Chosin, and Junction City were just a few of the analyses we conducted and learned from in these conferences.

Finding the combat veterans proved easy; I simply asked for volunteers through the local Veterans Association. The veterans were chosen for the key NCO leadership positions they held at the time of the battle under discussion—squad leader, platoon sergeant, and the like. (I chose not to use officers because I wanted the theme of the conferences to be NCO leadership in combat and the

way that leadership affected and motivated young infantry soldiers.)

During a typical conference, the platoon leaders first gave a battle analysis of the tactical operations, complete with terrain board, maps, and overlays. This was followed by personal remarks from the visiting veterans to whet the soldiers' appetites. Then the soldiers were given an opportunity to ask the combat veterans questions on the lessons learned.

The soldiers became totally immersed in the realities of combat and its accompanying hardships. They heard from seasoned veterans that they must train hard and work as a team, and that NCOs must lead to survive. There was no doubt in my mind that afterwards the young soldiers, when their leaders told them to low crawl or to run that extra mile in training, would remember the words of the veterans, "Keep your head down or die," or "Physical fitness and intestinal fortitude won the fight."

Such conferences require very little logistical support to be successful; they require only the initiative and planning of a few key leaders.

This is by no means a revolutionary training technique, but it has helped one company build esprit de corps by allowing the riflemen to learn from living history and to prepare for combat through the lessons they learned.

Our retired warriors are key assets that we must use in peacetime, because one lesson learned today may save a soldier's life tomorrow.

RICHARD THOMAS

CPT, Infantry
Co. D, 1st Battalion,
502d Infantry
Fort Campbell, Kentucky

MAP COURSE

Reference the article by Major Charles F. Coffin III entitled "Map Course Distances" (INFANTRY, July-August 1989, pages 12-15), I couldn't believe what I was reading. Everything was fine until the author stated, "Using a pocket calculator multiply...and you should see 2745.906044...."

I can just visualize some young infantryman, up to his armpits in mud, saying, "Hang on Sarge, I'll check the distance by calculating the square root of the first two legs and obtaining the hypotenuse of the third."

We should not confuse our soldiers with complex methods of map reading when simpler ones are available. Each map has a scale on the bottom of it that allows us to get as close in distance as we need to. A piece of paper, a pencil, and a protractor have worked very well for many years. It seems pointless to calculate distances down to five meters if we can't determine what five meters is on the map.

FM 100-5 lists simplicity as one of the Principles of War. When preparing any plan, order, or program, the principle of KISS (keep it simple, soldier) should always be employed.

RUSSELL A. GALLAGHER

MAJ
TRADOC Liaison Officer
Tactical Doctrine and Arms Directorate
United Kingdom

EDITOR'S NOTE: We must point out that Major Coffin presented this technique primarily for use in setting up an accurate map course on which to check "the knowledge soldiers have gained in the classroom" and to build their confidence, or for use in other situations where there is a "need to know the precise distance between two points."

WEST POINT ASSIGNMENTS

The Department of Social Sciences at the United States Military Academy is looking for highly qualified company-grade ROTC and OCS officers from Basic Year Groups 1982 to 1989 who are interested now or who may have a future

We welcome letters from our readers and print as many of them as we can. Sometimes it takes a while before we find room. But keep writing on topics of interest to our readers, and we'll do our best to publish your comments, sooner or later. All letters are subject to editing to fit space and other editorial considerations.

interest in civilian graduate study followed by a teaching assignment at West Point.

The Department of Social Sciences educates cadets in the academic disciplines of political science (U.S. and international), economics, and management.

The Department's exceptionally competitive selection process requires that officers express their interest early and begin the application process. Now under consideration, for example, are the applications of officers who may be available to start graduate study in the summer of 1991 or later.

Officers available for the 1991 group must complete their applications, including reports of GRE or GMAT scores, not later than 31 March 1990.

Selection criteria include branch qualification before beginning graduate school, demonstration of strong long-term military potential, and undergraduate or graduate records that indicate the officer's ability to gain admission to a top university and successfully complete graduate study.

For more information, please write to the Department of Social Sciences; U.S. Military Academy; ATTN: Captain William K. Sutey, West Point, NY 10996.

W.K. SUTEY
CPT, Infantry
Assistant Professor and
Assistant Personnel Officer

BOOK ON 22d INFANTRY

I am working on the second volume of a history of the 22d Infantry Regiment and would like to hear from current or former members of that regiment.

Please write to me at P.O. Box 1145, Roanoke, VA 24006, or call me at (703) 342-3222.

BUD FEUER

ROA SCHOLARSHIPS

The Reserve Officers Association (ROA) of the United States will award

100 college scholarships worth up to \$500 each for the 1990-91 academic year.

Seventy-five of these will be undergraduate scholarships to members, or children or grandchildren of members, of the ROA or ROA Ladies Clubs. Children under 21 years of age of deceased but paid members are also eligible. The 25 graduate fellowships will be awarded only to members of the ROA.

A six-member committee screens the applications and selects the winners.

Applications for the 1990-91 academic year are now available to anyone who is interested from ROA Scholarships, 1 Constitution Avenue, N.E., Washington, DC 20002; telephone 202-479-2200. Completed applications must reach the committee no later than 30 April 1990.

Undergraduate applicants must be attending, or must have been accepted to attend, full-time undergraduate studies at a regionally accredited college or university. Because of the minimum tuition fees involved, students attending community colleges will not be considered.

ROA scholarships are made possible by the voluntary donations of ROA members to the endowment fund.

HERBERT M. HART

ARTICLES ON KOREAN WAR

Garland Publishing, Inc., of New York, publishers of a compact Korean War encyclopedia, is seeking people to contribute articles ranging from 50 to 5,000 words on the various aspects of that conflict.

The solicited articles include military engagements and air operations, weapons and technology, diplomacy, personnel, psychological operations, armistice negotiations, and the like.

Potential contributors should contact me at 507 S. 5th Street, Spring Lake, NC 28390. I am also Command Historian,

U.S. Army John F. Kennedy Special Warfare Center and School, Fort Bragg, North Carolina.

STANLEY SANDLER

KOREAN WAR MUSEUM

The War Memorial Service-Korea was founded in January 1989. One of its major tasks is to establish a consolidated national war museum to be built in Seoul.

This effort is not only the concern of the Korean people but also of those who participated in the Korean War under the United Nations banner and also the freedom and peace loving allied nations throughout the world. Consequently, the successful accomplishment of this undertaking demands active interest, support, and cooperation of all the individuals and organizations directly or indirectly related to the Korean War.

We will appreciate any suggestions for the exhibition and any materials related to the Korean War that the United States and its military organizations may have available.

Anyone who would like to help us in this effort may write directly to me at The War Memorial Service-Korea, #8 Yong San Dong 1 Ka, Yong San Koo, Seoul, Korea. 140-021, or to the office of the Defence Attaché in the Republic of Korea Embassy in Washington, D.C.

BYUNG HYUNG LEE
Lieutenant General, Retired
President

PHOTOGRAPHS NEEDED

The Command and Staff Department, U.S. Army Armor School, is establishing a photographic display of current armor battalion/cavalry squadron and heavy brigade/cavalry regiment commanders.

We need current 8x10 color photo-

graphs of the infantry colonels, in Class A uniform, who command heavy brigades with at least one armor battalion assigned.

Photographs should be sent to Professional Development Division, USA-ARMS, ATTN: ATSB-CS-PDD-T, Fort Knox, KY 40121-5211.

A.W. KREMER, JR.
COL, U.S. Army
Fort Knox, Kentucky

BOOK ON RECONDO

I am trying to gather some historical information about RECONDO training for a book, especially the schools at Fort Campbell, Fort Bragg, and West Point and in Vietnam.

Anyone who has such information or who knows a former student or cadre member at these schools may write to me at 2379 N.E. Loop 410, San Antonio, TX 78217; or call 512-657-2820.

E.J. SCALES

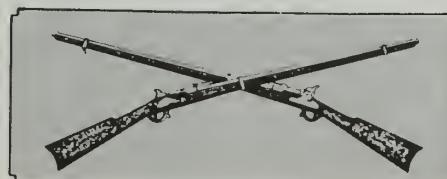
MILITARY HISTORY SYMPOSIUM

The Department of History of the U.S. Air Force Academy will sponsor the Fourteenth Military History Symposium 17-19 October 1990.

The symposium, entitled "Vietnam, 1964-1973: An American Dilemma," will examine the disparate nature of the United States' combat involvement in Vietnam, focusing on the resulting "dilemmas" during the Johnson and Nixon presidencies.

For more information, anyone who is interested may write or call me at the Department of History, USAF Academy, CO 80840-5701; telephone 719-472-3232.

SCOTT ELDER
Captain, U.S. Air Force



INFANTRY NEWS



INFANTRY ARTEP PUBLICATIONS are being updated. Under the old infantry ARTEP system, a single document (ARTEP 7-15, dated 18 June 1979) was used to train and evaluate dismounted infantry battalions and a single document (ARTEP 71-2, dated 23 November 1981) was used to train mechanized infantry battalions.

To better meet the training needs of each unit level, the new ARTEP outlined in TRADOC Regulation 310-2, dated 15 July 1986, required the development of separate Mission Training Plans (MTPs) for each type of platoon and company within the dismounted and mechanized battalions.

To meet these requirements, the Infantry School has published nine new MTPs. Because of different publication dates for the various publications, however, the supersession statement in some books may be either missing or wrong. To avoid confusion as to which training document to use in training a unit, the following information is provided.

The following ARTEPs have been superseded and are no longer valid:

ARTEP 7-15, Army Training and Evaluation Program for Infantry Battalions, dated June 1979.

ARTEP 71-2, Army Training and Evaluation Program for the Mechanized Infantry/Tank Task Force, dated November 1981.

ARTEP 7-246-12-MTP, Mission Training Plan for the Mechanized Infantry Mortar Platoon (4.2-inch), September 1987.

ARTEP 7-247-10-MTP, Mission Training Plan for the Mechanized Infantry Platoon and Squad (M113 Equipped), March 1987.

ARTEP 7-247-11-MTP, Mission Training Plan for the Mechanized Infantry Platoon and Squad (M2 Equipped), April 1987.

ARTEP 7-115, Army Training and

Evaluation Program for the TOW Light Attack Battalion, 25 January 1980.

ARTEP 100-1, Army Training and Evaluation Program for the Maneuver Brigade (Command Group and Staff), May 1978.

The following ARTEP Mission Training Plans have superseded the ARTEPs listed above:

ARTEP 7-8-MTP, Mission Training Plan for the Infantry Platoon and Squad, September 1988. Publication Identification Number (PIN) 064775-000. It will be used to train and evaluate both dismounted and mounted (M113 and BFV) infantry platoons and squads. It supersedes all of the infantry platoon and squad tasks in ARTEPs 7-15, 7-247-10-MTP, and 7-247-11-MTP. (ARTEPs 7-247-10-MTP and 7-247-11-MTP superseded all of the mechanized infantry platoon and squad tasks in ARTEP 71-2.) ARTEP 7-8-MTP is the only authorized Mission Training Plan for infantry and mechanized platoons and squads.

ARTEP 7-10-MTP, Mission Training Plan for the Infantry Rifle Company, October 1988 (PIN 064777-000). This publication supersedes all the infantry rifle company portions of ARTEP 7-15. It will be used to train all dismounted infantry including regular infantry, light infantry, airborne, air assault, and Ranger companies.

ARTEP 7-20-MTP, Mission Training Plan for the Infantry Battalion, December 1988 (PIN 065100-000). This ARTEP is designed for infantry, light in-

fantry, airborne, air assault, and Ranger battalions. It supersedes the battalion staff and command and control tasks found in ARTEP 7-15, June 1979, and in ARTEP 7-115, January 1980.

ARTEP 7-30-MTP, Mission Training Plan for the Infantry Brigade (Command Group/Staff), February 1989 (PIN 065423-000).

ARTEP 7-90-MTP, Mission Training Plan for the Infantry Mortar Platoon/Section and Squad, August 1989 (PIN 066400-000). It applies to all infantry mortar units, including those in mechanized, armor, or cavalry units. It supersedes all of the mortar portions of ARTEP 7-15, ARTEP 71-2 (November 1979), and ARTEP 7-246-12-MTP and the mortar portions of the Armor School ARTEP 17-55, Army Training and Evaluation Program for the Armored Cavalry Squadron, 19 April 1982.

ARTEP 7-91-MTP, Mission Training Plan for the Antiarmor Company/Platoon/Section, October 1989 (PIN 066010-000). This publication supersedes all of ARTEP 7-248-13-MTP, September 1987, the company, platoon, and section portions of ARTEP 7-115, January 1979, and pages 10-3-1 through 10-4-8 of ARTEP 7-15, June 1979.

ARTEP 7-92-MTP, Mission Training Plan for the Infantry Scout Platoon/Squad and Sniper Team, March 1988 (PIN 065511-000). Applicable to all infantry units, including mechanized units, it supersedes all scout portions of ARTEP 7-15 and ARTEP 7-115.

ARTEP 7-94-MTP, Mission Training Plan for the Infantry Battalion Headquarters and Headquarters Company, Combat Support, and Combat Service Support, October 1989 (PIN 066701-000). This publication applies to all infantry units, including mechanized units. It supersedes all portions of ARTEP 7-15 and ARTEP 71-2 (November 1981) concerning the head-

INFANTRY INDEX

The 1989 index to INFANTRY has been prepared separately and is available to anyone who requests a copy. Please address your requests to Editor, INFANTRY, P.O. Box 2005, Fort Benning, GA 31905-0605.

quarters company, medical platoon, communications platoon, support platoon, and maintenance platoons of the infantry battalions.

ARTEP 71-2-MTP, Mission Training Plan for the Mechanized Infantry Battalion Task Force, June 1988 (PIN 064766-000). It supersedes the battalion staff and command and control portions of ARTEP 71-2, dated November 1981.

ARTEP 71-1-MTP, Mission Training Plan for the Tank and Mechanized Infantry Company, and Company Team, October 1988 (PIN 064771-000). The lead proponent for this publication is the U.S. Army Armor School, with the Infantry School as co-proponent. This publication supersedes all company mechanized infantry portions of ARTEP 71-2, November 1981.

The Infantry School does not stock these publications. Requests for issue should be addressed through the Pin Point Distribution system. Written questions or comments concerning the new ARTEP products may be addressed to Commandant, U.S. Army Infantry School, ATTN: ATSH-TD-T-U, Fort Benning, GA 31905-5593.

The point of contact at the Infantry School concerning these training publications is Fred Lemon, AUTOVON 835-1317/4848 or commercial 404-545-1317/4848.

THE DEFENSE TECHNICAL Information Center (DTIC) is the central point within the Department of Defense (DoD) for acquiring, storing, retrieving, and disseminating DoD-sponsored research, development, and engineering studies. Its primary mission is to support the management and conduct of DoD scientific and technical information research efforts.

DTIC's principal services include online access to major DTIC and com-

mercial databases; automatic document distribution; current awareness bibliographies; subject bibliographies; recurring reports; and special programs.

Anyone who is interested in becoming a DTIC user may call 202-274-7434 or write to Defense Technical Information Center (DTIC-BC), Cameron Station, Alexandria, VA 22304-6145.

THE M1 MINE CLEARING Blade System is the latest addition to the growing family of countermine items used for breaching and clearing minefields.

It consists of a mounting bracket, push-beams, skid shoes, moldboards with tines, an electro-mechanical lifting

THE RANGER TRAINING Brigade's schedule of Ranger and Long Range Surveillance Leader's (LRLS) classes for the remainder of FY 1990 is shown in the accompanying box.

To attend the Ranger Course, students must report before 0800 on Friday, the start date, to Building 5024, Ranger Training Brigade area, Harmony Church. They must not report Thursday night.

To attend the LRLS Course, students report to Building 5014, Ranger Training Brigade area, Harmony Church, by 1200 hours on the start date. There will be no late in-processing for either course.

LRLS students must be in the rank of sergeant or above, but the first lieutenant

system, and a "dog bone" chain assembly.

The tines sift the ground for mines while the moldboards deflect the soil and the mines to the side. The "dog bone" chain assembly, which is suspended between the two moldboards, contacts and detonates any tilt-rod fused mine that would pose a threat to the hull of an M1 Abrams tank.

Unlike any other systems, which breach and neutralize mines by detonating them, the MCBS extracts mines in front of the tank's tracks and casts them to the side of the vehicle without detonating them. The M1 MCBS therefore is not limited as to the type of mine or mine-fuze it can neutralize.

colonel in a corporal's chain of command may waive this requirement for him. These soldiers are reminded that the Army Physical Fitness Test, the Combat Water Safety Test, and the land navigation written and practical exercise are prerequisites for the course. These tasks will be tested within the first three days of each class.

The Army gray PT uniform (summer and winter) has been added to the packing list for both courses.

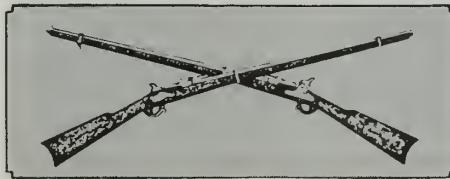
The point of contact for further information on both courses is Captain R.D. McNeil, S-3, 4th Ranger Training Battalion, Fort Benning, Georgia; AUTOVON 784-6515, or 404-544-6515.

THE RANGER COURSE

CLASS	START DATE	GRADUATION
4	2 Feb 90	10 Apr 90
5	2 Mar 90	8 May 90
6	30 Mar 90	5 Jun 90
7	11 May 90	17 Jul 90
8	8 Jun 90	14 Aug 90
9	6 Jul 90	11 Sep 90
10	27 Jul 90	2 Oct 90
11	17 Aug 90	23 Oct 90
12	14 Sep 90	20 Nov 90

LONG RANGE SURVEILLANCE LEADER'S COURSE

CLASS	START DATE	GRADUATION
AC 3-90	8 Jan 90	12 Feb 90
AC 4-90	26 Feb 90	2 Apr 90
AC 5-90	9 Apr 90	14 May 90
AC 6-90	21 May 90	25 Jun 90
RC 1-90	7 Jul 90	21 Jul 90
RC 2-90	28 Jul 90	11 Aug 90
RC 7-90	20 Aug 90	24 Sep 90



PROFESSIONAL FORUM



The Soldier's Load Planning Smart

LIEUTENANT COLONEL JOHN S. O'CONNOR
MICHAEL S. BAHRKE

EDITOR'S NOTE: This article is the first in a planned series of three. It offers guidance on the various factors a commander must consider when planning the operational loads their soldiers will carry. The second article will detail a physical training program that is designed to improve our soldiers' ability to carry loads on road marches. The third will provide information gained from a study that highlights the factors that are most important in determining road marching performance.

History has shown repeatedly that the burden a combat soldier carries directly affects his ability to fight and thus his chances for victory. With the addition of a significant number of "light" forces to the Army in recent years, the problem of the loads soldiers must carry in combat has received renewed attention.

Modern commanders of light infantry units must think seriously about the question of how much equipment they can require their soldiers to carry without adversely affecting their ability to fight. The solution is not a simple one; it requires critical command judgments.

Various agencies have dealt with the soldier's load issue, but they have not

reached a consensus on a doctrinal answer. As in tactical decisions, load-carrying decisions depend upon the situation.

This article takes a brief look at the doctrinal approach to lightening the soldier's load and provides certain planning information that commanders must consider when determining the operational load their soldiers will carry. It also includes a number of research-based planning factors for loaded movements.

APPROACHES

Before its demise, the Army Development and Evaluation Agency (ADEA) spent considerable time and resources trying to find ways to reduce the soldier's load and increase his ability to carry his mission essential equipment. Those efforts resulted in five approaches:

- Lighter weight components.
- Special load-handling equipment.
- Re-evaluation of current training doctrine.
- Better soldier load-planning models.
- Special physical training programs.

The first of these, the concept of using lighter components in equipment, is as old as the Army itself. Significant

progress has been made in reducing weight without detracting from function—as demonstrated in the latest versions of uniforms, equipment, and weapons—but technology is not a cure-all. The primary drawbacks to the technological approach are still the prohibitive cost, poor performance capability, and inadequate length of service of such equipment. Additionally, it has been estimated that, in equipment design, only six percent of the total weight can be reduced through advanced technology and components.

The use of special load-handling equipment can increase the total amount of equipment that is moved and can help soldiers transport it forward. For example, handcars, animals, and small mechanical trucks (such as the M274 "Mule") have been used in the past with varying degrees of success to help soldiers move their equipment. In some instances, these systems are still part of the Army's tactical equipment. Unfortunately, though, in many cases such items are not suitable for use in tactical situations or deployment schemes. Further, they add more burdens to a unit in terms of training, maintenance, and support. Paradoxically, they even add to the supplies that must be moved forward.

The idea that improvements in training and doctrine can facilitate improvements in the type and amount of equipment soldiers must carry into combat is relatively new and untested. For example, this concept suggests that improved marksmanship can reduce the number of rounds of ammunition a soldier will need for a particular combat mission. Likewise, it suggests that the more judicious and timely deployment of a well-disciplined force can reduce the amount of support the soldiers will need to do their job, thus reducing the loads they must carry. Few will argue against better training and more imaginative doctrine for improving combat effectiveness, but it is uncertain that this concept will produce direct or significant savings in the amount of weight soldiers must carry into battle.

The proposal to develop better load-planning models places the responsibility for the soldier's load directly on the leader. In order to select only the equipment his unit will need to accomplish its mission (instead of over-burdening the soldiers with the "just-in-case" provisions often directed by those who are not actually going to carry the load), a leader must gather all of the information he can about the mission, enemy, terrain, troops, and time available.

MOBILITY

In addition, a leader must distribute loads wisely to improve his unit's ability to sustain its mobility; this will also reduce fatigue and insure that the soldiers have the physical vigor they will need for the fight.

The proposal that special physical training programs be designed to improve the individual soldier's ability to carry a load is not aimed at reducing the load itself but at improving the soldier's ability to carry it.

This is a straightforward and logical approach. Without question, a more physically fit soldier will be able to carry a heavier load, and carry it longer with less fatigue, than an unfit soldier. The most appealing aspect of this approach is that any unit can put it into practice with

guaranteed results. Commanders must recognize, though, that physical training will not make up for overloading. Training soldiers to carry 80 pounds, for example, does not prepare them to carry 120 pounds when they are alerted to deploy.

All of these considerations provide a doctrinal approach to reducing the soldier's load and improving his ability to move his equipment on the battlefield. While it is important for commanders to understand the present doctrinal efforts, in reality they should concentrate their ef-

orts on those areas in which they can exert a direct influence—the load-planning and physical training approaches.

For most commanders the question remains: What is the heaviest load a soldier can carry and still function effectively on the battlefield? Obviously, there is no single answer to that question. To make smart decisions, a commander must expand this question and ask: How far, how fast, over what terrain, and under what conditions will the soldier have to carry the load? And also, what does the soldier have to do afterwards and how soon?



A unit's load plan should be based on the soldiers' relative body size and weight.

MISSION CHARACTERISTICS

1. Movement route
 - Open march (roads/trails)
 - Movement in cover
 - Type of movement (walk, crouch, crawl)
2. Clothing (MOPP-level, patrol)
3. Schedule requirements
 - Distance traveled
 - Rate of movement
 - Rest/move schedule
 - Feeding schedule (planned, on-the-move)
 - Post-march recovery plan
 - Sleep plan
4. Physical demands of the engagement (MOUT, obstacles, and the like)
5. Environmental characteristics
 - Visibility
 - Day/night
 - Vegetation/terrain features
 - Weather
 - Temperature
 - Humidity
 - Wind (speed/direction)
 - Wind chill
 - Precipitation
 - Terrain characteristics
 - Altitude
 - Grade
 - Surface characteristics
 - Vegetation
 - Natural irritants
 - Insects
 - Plants
 - Animals
 - Artificial irritants
 - NBC considerations
 - Noise
 - Smoke
 - Potable water supply

Table 1

With these questions in mind, Tables 1 through 3 list certain factors a commander should consider during the planning stages of those operations in which individual soldiers loads could have a definite bearing on the outcome of the mission.

The positive benefits of smart leadership cannot be overstated. As in most activities, well-led units perform better than poorly led ones during road marches with loads. Nevertheless, leaders cannot ignore the realities of physical effort. For example, an error leaders frequently make in determining the loads their soldiers will carry is to rely on their units' aggressiveness. Their rationale for this is that well-trained soldiers, when they must, can "suck it up and drive on." While it is true that soldiers can often per-

form above the expected levels for short periods, constantly requiring extraordinary effort from them only sets the stage for failure in the long run.

Many infantrymen accept the often-quoted 1984 Infantry School guidance of 72 pounds for approach marches and 48 pounds for combat actions as being the maximum loads soldiers should carry. Unfortunately, this all-encompassing general rule of thumb can be widely inaccurate, because it ignores the School's later guidance that a soldier's weight must also be taken into account. (See Commandant's Note, by Major General Edwin H. Burba, Jr., INFANTRY, May-June 1986, pages 2-3.)

In fact, a soldier's ability to carry a load successfully without undue fatigue is closely related to his size. For exam-

SOLDIER CHARACTERISTICS

1. Physical (anatomical, physiological, medical)
 - Height/weight
 - Body type
 - Physical condition (cardiovascular endurance, muscular strength)
 - Nutrition/hydration status
 - State of rest/fatigue
 - Condition of the feet
2. Psychological
 - Level of motivation
 - Mood state
 - Self-confidence
 - Fatigue
3. Training/conditioning
 - Training in preparing loads for movement
 - Use of load bearing equipment
 - Condition of boots and socks
 - Experience in march and water discipline
 - Experience in carrying combat loads
 - Move/rest cycle experience under loaded conditions

Table 2

ple, a 150-pound soldier who must carry a 100-pound load, or 67 percent of his body weight, expends a large amount of energy and can be expected to tire rapidly. On the other hand, a 200-pound soldier with the same 100-pound load carries only 50 percent of his body weight and expends far less energy.

The lesson for leaders is that a unit's load plan should not be based on distributing the unit's equipment equal-

ly among the soldiers, but on the soldiers' relative body size and weight. Recent research suggests that loads of 35 to 45 percent of a soldier's body weight are the most desirable for sustained non-contact movements, with 20 to 30 percent being the most realistic for combat missions. Loads should be as specific as possible for each mission.

(In determining which end of this weight range to select, leaders should also consider a soldier's physical condition. There is no absolute rule for this, however.)

Previous research on load bearing has established the fact that the rate at which a soldier expends energy will determine how long he can carry a given load. For example, a soldier carrying a 77-pound load and moving at 3.5 miles per hour will expend almost twice as much energy (550 kilocalories per hour) as one carrying 40 pounds and moving at 3.0 miles per hour (300 kilocalories per hour). Commanders must therefore consider energy expenditure in determining their soldiers' ability to sustain movement while marching with heavy loads.

In addition to the weight soldiers will carry, leaders must also consider the type of ground they will be covering and the speed at which they can be expected to move on that ground. Anything that increases the amount of energy the soldiers use will also lessen the length of time they can sustain effective movement. As one might expect, the terrain is an important factor in sustaining movement with a

LOAD CHARACTERISTICS

1. Load
 - Weight
 - Bulk
 - Multi-soldier loads
2. Load bearing equipment
 - Rucksack
 - Hand carry requirements
 - Backboard
 - Yoke/sling
 - Man carts
3. Load configuration
 - Balance
 - Stability
 - Distribution

Table 3

load. The softer (and steeper) the ground and the thicker the vegetation, the higher the energy expenditure and the sooner speed of movement declines. Marching all night and attacking all day makes for good reading, but in reality sets the stage for defeat.

After assessing these various planning considerations, smart commanders can determine the amount of equipment that

will be needed for a specific operation. And once they have identified the load, they can more wisely distribute the equipment throughout the force to reserve the soldiers' energy.

Commanders who take all of these factors into consideration can formulate realistic movement plans that will give their tactical plans the greatest possibility of success.

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Improving the Division LRSU

MAJOR THOMAS M. JORDAN

Having recently commanded a long range surveillance unit (LRSU) in Europe, I feel a need to voice publicly some thoughts regarding organization, doctrine, force structure, and equipment problems associated with the division long range surveillance unit. My intent is to focus on what I consider major shortfalls and to suggest some solutions that we initiated and others that could solve the problems.

First, the current TOE design, which requires a divisional LRS unit to be a detachment (assigned to the headquarters and headquarters service company of the military intelligence (MI) battalion), is clearly unworkable. In fact, I knew of no LRS unit in Europe that actually operated as a detachment. Most were designated Company D in the MI battalion, as ours was, and operated as such. This gave us a much greater ability to plan, train, and execute missions; provide for administration; and create an atmosphere of excellence.

As a commander, I relied almost exclusively on Field Manual (FM) 7-93 and its related mission training plan, ARTEP 7-93-MTP, to provide the doctrinal basis for training and assessing the company. These two manuals provided invaluable assistance in terms of developing long

and short range plans, a company SOP, and training exercises.

Basically, our company operated as described in the manual. We had a forward base consisting of the company operations cell and 31C communicators (single-channel radio operators), a rear base consisting of four or five 31Cs plus equipment, and six surveillance teams.

ORGANIZATION

I became an enthusiastic supporter of the earlier decision to move LRS units from the cavalry squadron to the MI battalion. This enabled key signal intelligence (SIGINT) and human intelligence (HUMINT) collection units to be co-located under one command and control system, which improved the synchronization of their respective efforts.

During REFORGER 88, we did not co-locate our LRS command post and forward base with the division tactical operations center (DTOC) as FM 7-93 discusses. If we had done so, the military intelligence battalion would have been shortchanged in the command and control synchronization and collection processes.

We found it much more effective to lo-

cate within sight of the battalion headquarters, to transmit our reports to the battalion and the DTOC by the radio teletype with backup communications to the battalion by messenger and PSC-2 (a new device that allows a sender to type a message and burst it to a receiving station using FM radio waves). As reports flowed in to the battalion, the most urgent of them were communicated to the DTOC from the S-2 by pulse control modulation (PCM).

There were several advantages to this system:

- Our logistical support was from our parent unit, not from an already overburdened division headquarters and headquarters company.

- The MI battalion commander, the G-2, and the LRS commander were able to select missions on the basis of a clear intelligence picture, and the MI commander and staff were not cut out of the collection process.

- The SIGINT missions could be better coordinated with the HUMINT missions.

- The LRS forward base and command post did not have to tear down communications with every DTOC jump and could maintain an extremely small signature.

•The DTOC and the MI battalion operations centers received LRS collection data almost simultaneously.

The prescribed six teams are not enough to support a division's requirements. Exercises such as REFORGER clearly indicate the tremendous intelligence payoff that LRS teams can provide. But the tactical situation in such exercises often dictated that we deploy all six teams, and once we did our ability to either move the teams to different positions or react to new situations was reduced or lost.

I believe, therefore, that divisional units should have eight teams consisting of two platoons of four teams each. The platoons should be commanded by second lieutenants. This would improve training and command and control, and would allow greater flexibility and provide for more realistic operational requirements.

The current TOE also creates some other personnel and equipment problems.

Our division augmented the company with an executive officer, an operations sergeant, and a supply sergeant. The XO and the supply sergeant have been integrated into the upcoming MTOE (modified TOE) as authorized positions, but the TOE also needs to reflect an armorer, an NBC NCO, a supply clerk, an operations sergeant, and an intelligence sergeant. In addition, the detachment sergeant position, now authorized platoon sergeant rank, should be upgraded to first sergeant rank.

Chief among personnel problems in operating the company are replacements and training. The long range surveillance skill carries a Q6 identifier; when I turned over command, my unit had only three graduates from the Fort Benning LRS Course. All too often, particularly in a Bradley-equipped division, we were forced to interview 11M and 11H volunteers for team positions. Although these highly motivated soldiers eventually paid great dividends, in the beginning our training program had to make up for their total lack of LRS experience.

Currently, an LRS team consists of six soldiers—five 11B infantryman and one 31C radio operator. I believe team leaders and assistant team leaders should be

11B3VQ6s, infantrymen with airborne, Ranger, and LRS training. (The current MTOE authorizes airborne and Ranger qualification for the team leader but only airborne qualification for the assistant team leader.) We found than an average 11B noncommissioned officer could not handle the team leader position unless he had an extensive light infantry background.

Too, our 31C enlisted soldiers were not trained on the type of radios we used (HF 104), and many of them could not adapt to the demanding physical standards. This was even more true of the



31C NCOs, whose experience typically consisted of operating a radio teletype-writer.

In fact, because of personnel shortages, most of the team radio operator positions were filled by infantrymen, and the infantrymen in our unit often knew more about HF radio communications than the 31C soldiers. Our communication requirements were the same for the deployed teams and for the two base stations that were staffed by 31Cs.

For these reasons, I believe the 31C MOS should be eliminated from the LRS teams. To make this an acceptable solution, however, and to help alleviate the training burden, all assigned NCOs and soldiers should have the specific LRS identifiers, or they should successfully complete the training for their job requirements before they arrive in the unit.

The major problem with the TOE in regard to equipment is that the unit lacks

the organic vehicles it needs to move soldiers. Consequently, transportation must be obtained for training missions, field deployments, and insertions or extractions that do not involve helicopter support. Even moving to an airfield or an isolated planning location poses a difficult problem, because the MI battalion has no support platoon and is sorely pressed to provide this support.

Because of the widespread deployment that is characteristic of an LRS company, the problem is amplified. For example, during REFORGER, our teams were spread 60 kilometers across the division front and 50 kilometers behind enemy lines with our two base stations about 175 kilometers apart.

Unquestionably, the divisional LRS unit TOE should require at least two five-ton trucks, and the division should strongly consider dedicated air support as well. A minimum solution would be two Black Hawk helicopters.

In addition, the TOE needs to authorize a lightweight, secure, internal team radio; an Army-issued telescope with at least 30-power magnification; easily assembled, lightweight HF antennas; a device to measure power output for the base station radios; a silenced weapon for each team; and M-8 chemical agent alarms that would be used at base station sites. These equipment deficiencies now plague the LRS units and force them either to purchase some of these items locally when funds are available or to go on relying on antiquated equipment.

I am confident that the current LRS units can perform their wartime mission. When their reporting can be correlated with a signal intelligence capability, they can provide timely and accurate intelligence to the decision makers.

The suggestions offered here are based on a combination of doctrine and hard-earned experience. They are offered in the spirit of improving the current organization's capacity to perform.

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Esprit

Making It Work for You

BRIGADIER GENERAL JAMES E. SHELTON, U.S. Army Retired

As long as military units are made up of people, people will be their most important ingredient. What a unit commander must do is capture the imaginations of those people, harness their energies, and focus their actions on the unit's mission. It is that focus—combining desired actions—that will provide the teamwork necessary to the unit's success.

Many techniques can be used to capture the imaginations of the soldiers in a unit, such as stories from the unit history, battle streamers, or examples of heroism and self-sacrifice. The commander must believe in his examples and make his presentations convincing and sincere. This effort must be continuously reinforced—at the initial unit orientation, payday talks, training critiques, and every opportunity commanders have to talk to their men in groups.

Soldiers like to be reminded of their organization, because it is through the organization that they receive most of their personal recognition. They want to "have a home" and be proud of their unit; and they enjoy it most when their leaders talk to them face to face about their organization.

In commanding two rifle companies, an infantry battalion, and an infantry brigade, I found that unit slogans helped capture the soldiers' imaginations and focus their behavior.

The first unit was Company D, 1st Battle Group, 7th Cavalry, 1st Cavalry Division, in the late 1950s after the Korean War. At that time in Korea, the rifle company had about 80 U.S. soldiers

and 120 Koreans (under the Korean Augmentation to the U.S. Army, or KATUSA).

Since most of the Americans in the unit, including the leaders, felt sorry for themselves for being there, we had serious morale problems. Consequently, very little was done well. In particular, the physical conditioning of the soldiers was poor, and no one seemed to care.

CHALLENGING

Additionally, the most challenging tactical problem a commander faced in Korea was climbing the hills. The only way to be in good physical condition was to practice climbing them. Normal physical training would not do it.

So I tried to capture the imagination of the troops by adopting the slogan "None Too Big" for our company. And every day for PT, we climbed a mountain we called "Charlie Block." The first day, it took us two hours, but within four months we were doing it in 40 minutes.

During the annual Army Training Tests (ATTS, which are now called ARTEPs), our company finished the attack phase—seizing a series of hills—an hour ahead of any other company in the division. The other leaders and I hated to climb those hills, too, but after we were able to capture the imaginations of our men, we had to run to catch up with them.

The second slogan I used was while commanding Company D, 2d Battle Group, 501st Airborne Infantry, 82d Air-

borne Division in the early 1960s. At that time the Army was rebuilding itself from the throes of the strategy of "massive retaliation," the days when most of the defense budget had gone to bombers and missiles.

The early 1960s were an exciting time, and the 82d Airborne Division had filled itself with a large number of gung ho young paratroopers. We also had an excellent crop of career NCOs. It was a time when most of the senior NCOs lived in the barracks, few if any soldiers were married, and few soldiers had cars. Our biggest problem was that some of the men would go on pass and stay away—many times for 29 days, or just before they would have been dropped from the rolls as deserters.

These men were good soldiers when they were soldiering, but I needed to capture their imaginations. The company adopted the slogan "We'll Be There." This meant we (all of us) would always be where we were supposed to be, and on time. At reveille, at work formations, seizing an objective, carrying out a work detail—"We'll Be There." One of our platoon sergeants wrote a "jody" cadence to it and we sang "We'll be there" on our daily runs. The platoons posted the slogan on their wall lockers.

As a result, Company D was the first rifle company in the division at that time to go 30 days with no AWOLs and no delinquency reports. It wasn't the commander or the leaders who did it. We simply captured the imaginations of the men in the unit and focused their behavior. They didn't do everything per-

fectly, but they did kick the AWOL habit.

In the early 1970s, I commanded the 1st Battalion, 505th Infantry, 82d Airborne Division for two years. It was a hard time for the Army. The Vietnam War had just ended, and enthusiasm was at a low ebb. The Army was practically out of control, including the division. It was the time of "do your own thing," drugs, nighttime terror, and racial problems. The men did not look or act like soldiers, and many of our professional NCOs had been ground out in the Vietnam mill.

The slogan we chose was "Get It Together." We were the 505th Panthers and we had a unit history that wouldn't quit; our most serious problem was a lack of trust and faith in each other. The lack of discipline manifested itself in drug use and racial problems. The slogan "Get It Together" had a definite appeal, because no man—white, black, Hispanic, or any other—wanted to be in a unit where the

soldiers had no trust or respect for each other.

We were not perfect, but the slogan had meaning to the key leaders and men of the unit, and it helped us at a time when we desperately needed help.

In the late 1970s, I found myself commanding a mechanized infantry brigade—two mechanized battalions and one tank battalion—in the newly activated 24th Infantry Division at Fort Stewart. My predecessor in the 2d Brigade had built and trained a solid mechanized infantry brigade. Now I wanted to capture the imaginations of its soldiers.

When the division received its high priority mission for rapid deployment as part of the Rapid Deployment Force (RDF), we decided to call our brigade the "Vanguard" Brigade—out in front of the rest. And since the 24th Infantry Division was the "Victory" Division, our slogan was "Vanguard to Victory."

I believe the 3,000 men who were in

the "Vanguard" Brigade remember it because we were able to capture their imaginations, harness their energies, and focus their behavior on the unit's mission.

The leaders of each brigade, battalion, and company should always be trying to capture the imaginations of their men. They should not overlook meaningful and sincere slogans that can help focus the unit on its predominant problem or effort at a given time.

The power of people—combined and focused desirable behavior—can make any unit a winner. And in the infantry, what it takes is weapon system proficiency, physical conditioning, and focused leaders and soldiers.

Brigadier General James E. Shelton, who retired in 1983, served in eight divisions and the Berlin Brigade. He is a Combat Infantryman and a Master Parachutist.

The Soviet Army Coming to Terms with Its Afghan Experience

CAPTAIN PAUL H. VIVIAN

Defeat for an army, whether political or military or both, is traumatic. In the aftermath of the United States' exodus from Vietnam, the U.S. Army went through a period of intense soul searching. Were we militarily defeated or simply abandoned by pusillanimous politicians and a fickle public? Did we fight honorably? Did we fight well? Not surprisingly, the Soviet Army in the aftermath of its own "exodus" from Afghanistan is wrestling with the same basic questions.

A part of this process of reappraisal is the recent decision of *Voenno-istoricheskii zhurnal* (*Military History*

Journal) to establish, as a new, regular feature of the magazine, a section entitled "Afghanistan: Summary and Conclusions." Fittingly, they asked Lieutenant General Boris Vsevolodovich Gromov, the last commander of the Limited Contingent in Afghanistan and the current commander of the Kievan Military District, to inaugurate the new feature section.

General Gromov contributed an article entitled simply "They Defended, They Learned, They Built." The essay does not contain any profound military insights; it is, rather, an emotional retrospective. The article has a lively

style, reminiscent of a letter dictated to a secretary rather than a manuscript that has been labored over. Gromov's goals are to justify the sacrifices of his soldiers and to defend them against those who would besmirch their honor. In the process, Gromov reveals much about himself.

General Gromov's article offers a highly personal, rather than an "objective, historical," perspective on Afghanistan. The portrait that Gromov paints of himself is that of a professional soldier—a combat soldier—who is intensely loyal to his Motherland.

He establishes his credentials by point-

ing out that he has served several "tours in country." His first tour was from 1980 to 1982 when he served as a chief of staff and then commander of an unidentified *soedinenie*—an imprecise term that can mean a regiment or a division. He returned for a second tour from 1985 to 1986 as a representative of the Soviet General Staff. And his last tour, of course, was as commander of the Limited Contingent.

Like all good soldiers, General Gromov cannot resist telling a good war story. With clear pride, he reflects upon Operation Magistral, which he implies that he planned and led. The story is an entertaining one, but the real purpose of recounting it here is to demonstrate the competence and sophistication of the Soviet Army in Afghanistan.

As General Gromov tells the story, the enemy was dug in along the Satekundav Pass. The "*dushmani*," the Soviet term for Afghan freedom fighters, had constructed an elaborate network of obstacles overwatched by well-camouflaged and well-prepared defensive positions. The mission was to root out the enemy from the pass—in short, an unenviable task for any attacker and certain to result in heavy casualties.

Gromov studied the situation intently. His staff suggested the following course of action: First, there would be an airborne drop on the pass. This would force the enemy to reveal themselves and their positions. Then artillery and attack aviation would deliver a devastating blow against the enemy. Following this would be an attack by heavy weapons and infantry. It was certainly an audacious, albeit conventional, plan of attack.

The actual conduct of the operation is best described in Gromov's own words:

The paratroopers were carried to the drop zone in the vicinity of the Satekundav Pass by aircraft of the military transport aviation. A gust of fire fell on them. Anti-aircraft machine guns and cannons fired on them. And at that moment the firing positions of the mutineers were revealed for the blows of Soviet and Afghan attack aviation. Then this was followed by an artillery attack. In the course of an hour the entire system of fire of the mutineers was destroyed.

Victory?—Yes. But at what price? What about the hapless airborne soldiers who were dropped on the objective to force the enemy to reveal themselves? Another example of Soviet disregard for human life? No! As Gromov noted, "We didn't lose one man, because the airborne drop was a deception." Although precisely what happened is somewhat unclear, it appears that the transports did drop parachutes with dummies and not men weighing them down. No doubt it was tactical skill such as this that catapulted Gromov out of obscurity to high command.

Although the Soviet Army was capable, it encountered numerous problems. "The most important of them," according to General Gromov, was "the problem of the preparation of personnel for battle; the reorientation of peoples' consciousness from peaceful to military order, their psychological preparation." Acknowledging that the transformation from student, worker, or *kolkhoznik*, to warrior is a tough one, the General somewhat disingenuously assures his readers that most made the transition well, living up to the standards set by earlier generations. Unhesitatingly, he credits "our officer corps, political workers, party and *Komsomol* organizations" for helping turn young men into determined soldiers.

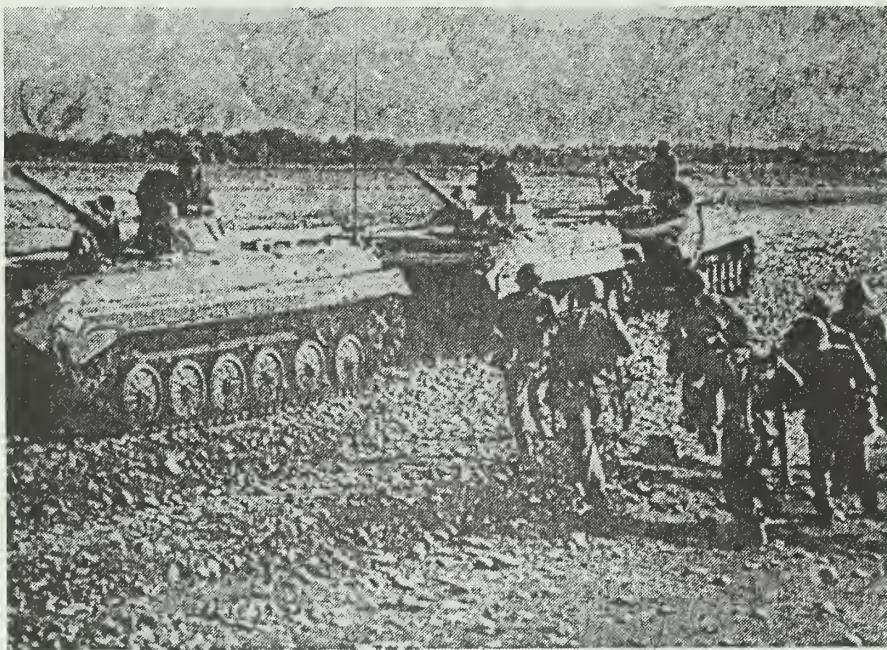
While the transition from school boy to warrior may have been difficult, the Soviet soldier, in Gromov's view, made this change and fought well and bravely. To make this point, he refers to the exploits of Soviet paratroopers on Hill 3234 on 7 January 1988. Although outnumbered, the paratroopers hung on in spite of repeated attacks. Under the onslaught of the attacking freedom fighters, their perimeter contracted. But the paratroopers fought tenaciously, vowing to fight to the last bullet; against the odds, they held on. Gromov is moved to remark, "Remembering this battle, one cannot help but reflect on how strong was the spirit of our boys, how strong was the will and adherence to the military oath and to a military order!"

In spite of such examples of heroism, though, General Gromov despairs of the press's recent tendency to disparage the competence and courage of the Soviet soldier and especially the Soviet officer. He says:

Watch out for those topics which are becoming offensive for our soldiers and especially for the officer corps. Often [the press] expresses the idea of the foolishness and heartlessness of the commander officer, the narrowness of his horizon.

Moreover, General Gromov is very sensitive to the charge that relationships between officers and soldiers were not





harmonious. He points to the numerous letters received in the command and political section that testify to the contrary. Gromov writes:

Friendship, born on Afghan soil in complex, dangerous circumstances among officers, warrant officers, soldiers, and sergeants continue to live even after the return to the Motherland.

Then the emotional nature of this essay is indicated by Gromov's jump back to the issue of soldierly steadfastness and bravery. He points out, for instance, that between 30 and 35 percent of all troops in Afghanistan were dedicated to rear area security operations. The troops were deployed in small, scattered outposts along main supply routes. General Gromov speaks in awed terms of their endurance and courage in such hard circumstances:

But who, where, and when, in what program of military training envisioned operations like this? ... One and a half, two years soldiers carried out service on these commanding heights, at a remarkable distance from one another, and, it is possible to say, surrounded by the enemy. There must be psychological compatibility, endurance, and staying power in a group of from seven to twelve people. Indeed, besides a camouflaged position, which was built by their own efforts from on-hand materials, technology, and weapons, there was nothing else.

With the same emotional intensity, General Gromov enumerates other hardships and privations that these soldiers faced:

Reserves of supplies of food, water, ammunition, firewood, and coal—all was supplied to the soldiers every two weeks and occasionally once a month. What can you say about this, how did people survive these long days, weeks, months, years? But people lived, carried out services, fulfilled military tasks. Undergoing attacks, shelling, they repulsed the enemy. This isn't an exploit, courageous and brave, this is not preparedness to carry out the burden and deprivation of military service?

Following this outburst, General Gromov reflects on the "good" that the Limited Contingent accomplished in Afghanistan, listing the number of hospitals, schools, and roads the soldiers built.

Gromov then bounces back to the emotional issue of prisoners of war. He notes that in Afghanistan as in World War II ("the Great Patriotic War") many soldiers said, "Better dead than a POW." The general recounts the story of Senior Lieutenant Onishchuk, Junior Sergeant Islamov, and Private Muradov who "blew themselves and dushmani up with hand grenades" rather than surrender.

In the latter part of his essay, General

Gromov focuses his attention on what he sees as the major "lesson learned" in the realm of operational methods—the devastating effects of mine warfare. The Afghan freedom fighters used mines to good effect. According to Gromov, "Basically, they mined the hard to travel parts of the road, approaches to water sources, detours, fords, villages, base areas, and depots." Moreover, they used mines in large number. For example, in 1988 some 4,882 antitank mines, 3,800 antipersonnel mines, and 1,162 fougasse bombs were uncovered, disarmed, and destroyed. The general goes on to note:

Mine warfare forced us to change our tactical methods and structure of the battle order of convoys. Thus, as a result of much analysis and experimental controls, the present working structure of military police units (otriada obespecheniya dvizheniya) was worked out.

Thus ends the analytical portion of Gromov's essay, and the general returns to the basic theme of his essay—the desire to defend the Soviet soldier who fought in Afghanistan from charges of dishonor or incompetence:

And there is still one thing I want to say. Now, when the Afghanistan theme has closed, there have appeared many honest, objective publications, but along with them one sees some material of an entirely different kind. Some guy "blessed" by a visit of several days on Afghan soil, arrives at general conclusions, and tries to artificially create the problem of "Afghan vets" in the USSR by hatching and absolutizing several separate negative facts in order to blacken the exploits of those Soviet people who with honor fulfilled their internationalist duty.

At about the time this article was printed, General Gromov appeared on the Soviet television program "Vzglad," or "View." The views he reflected on the air were the same as those in his article, but in the unstructured atmosphere of an interview, he allowed a sense of bitterness to seep in:

(Correspondent) For a long time, particularly during the first stage of combat activities in Afghanistan, our television and press gave various routine accounts about our troops planting trees, about

people meeting them with flowers, and only a little information leaked out about the fact that coffins were returning from there. Now what did you feel when you were a soldier in a nonexistent war?

(Gromov) You know, not only I but everybody felt resentment, great resentment as a matter of fact. The resentment was felt in a purely human way, because we were carrying out a difficult job. It was a difficult job in the beginning, I mean during 1980, 1981, 1982, although it was difficult later too, but particularly at the beginning because it was a new job for us and therefore it was twice as difficult.

Later in his interview, General Gromov went on to recount his emotions on crossing the bridge at Termez into the Soviet Union:

On the bridge, I fully realized and felt joy for being the last one out, knowing that no one who made up the limited troop contingent was left behind. On the other hand, there was a sense of bitterness. At the risk of sounding trite, there were tears in my eyes.

Throughout the interview, Gromov's central thesis remained the sense of honor and duty found among Soviet soldiers. For example, when asked, "What qualities underlie the words *Afghan veteran?*" Gromov replied:

I think first of all honesty, nobility, and love for people. Not just towards a friend or comrade, but generally love towards

people. This foremost. Of course there is also another important quality which is the ability to do more than you can, more than your strength allows.

There are some dangers in comparing the Soviet experience in Afghanistan with the U.S. experience in Vietnam. First, the two are not morally equivalent. The United States was, in my judgment, morally right in Vietnam; our cause was a just one. The Soviet Union's actions in Afghanistan, however, were unjust. They wanted to install forcibly an authoritarian Marxist-Leninist regime on the Afghan people. Second, it is fair to say that the level of both popular and governmental support for prosecuting the Afghan war was significantly higher in the Soviet Union than such support was in the United States for our involvement in Vietnam.

Nevertheless, there are parallels. Neither nation achieved a victory in the manner the public had come to expect—that is, the complete, unconditional defeat of an adversary. Both nations found themselves involved in long, drawn-out guerrilla wars of attrition. Furthermore, the returning soldiers encountered a populace that was either hostile or indifferent to their sacrifices.

The trauma of Vietnam caused the U.S. Army to enter into a period of introspection that led to heightened concerns over issues of ethics and questions of management versus leadership. For

the Soviet Army, this process of introspection has just begun.

General Gromov, as the last commander of the Limited Contingent in Afghanistan, is the natural point man in this process of reevaluation. He must deal with the charges from people such as Nobel Laureate Andrei Sakharov, who, before the Supreme Soviet and on national television, charged that the Afghan war was a "criminal adventure." On the same rostrum, Sakharov also repeated stories that Soviet gunships fired on and killed surrounded Soviet soldiers rather than permit their capture.

For many in the Soviet Army and especially among the Afghan veterans, General Gromov is the one best suited to do battle against that army's detractors, especially those who would disparage the skill and courage of the Soviet soldiers. General Gromov's essay "They Defended, They Learned, They Built" and his other statements should be viewed in this context. The coming months and years will ultimately tell us how well the Soviet Army has come to terms with its Afghan experience.

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Change of Command Inventory

CAPTAIN CHARLES J. MCKEEVER

When you are designated to command a company, the first thing you will have to do—along with the outgoing commander—is to conduct a joint 100 percent inventory of all the unit's proper-

ty and report the results to your battalion commander. This is a task that you cannot afford to take lightly. (See also "Platoon Inventory," by Major Curtis R. Rogers, INFANTRY, January-February

1982, pages 35-36.)

When you sign the company's hand receipt and assume command, you are saying in effect that all of the company's property is on hand and accounted for

and that you accept responsibility for preventing its loss, damage, or destruction. (As General Bruce Clarke once said, "Property shortages, without proper documentation, make tracks on your pay records that are hard to eradicate.")

You will also be responsible for establishing a command supply discipline program. (See AR 735-5, Basic Policies and Procedures for Property Accounting; AR 710-2, Supply Policy Below the Wholesale Level; and FM 10-14-1, Commander's Handbook for Property Accountability at Unit Level.) Supply discipline means adhering to regulations, achieving supply economy, and controlling property.

A thorough inventory process, in addition to allowing you to see all of your unit's property before you sign for it, will also help you establish a command climate that stresses the importance of safeguarding and maintaining equipment. In addition, it will enable you to assess, from the condition and layout of the equipment, the organization's state of readiness, property accountability, and discipline. And if you are thorough and well organized, it will help establish your credibility with your new soldiers as well.

I would like to share some lessons I have learned about the 100 percent inventory and describe an orderly and effective method of conducting it that is not found elsewhere. This method consists of three steps—preparation, inventory, and reconciliation—and good planning is the key to success.

First, you will be given a reasonable amount of time to complete the inventory, usually two weeks. During the preparation phase, first get your battalion commander's guidance, and review the local SOP covering change of command inventories, if there is one. Then visit your property book officer (PBO) and obtain copies of all the current hand receipts, shortage annexes, SOPs, technical manuals (TMs) or supply catalogs (SCs), and authorization documents to use during the inventory.

The PBO and members of his team will provide information and helpful hints concerning your duties as a hand receipt holder. Heed their advice and don't be

afraid to ask questions. You will receive a current hand receipt to use for your current inventory. Make sure the PBO updates all hand receipts, posts any changes, and freezes supply transactions during the inventory period.

Do your homework. Study all of the applicable regulations, SOPs, hand receipts, and your unit's authorization document—table of organization and equipment (TOE) or table of distribution and allowances (TDA)—which prescribes the unit's mission, structure, personnel, and equipment. To identify valid equipment shortages, compare the quantities shown on the hand receipt with what you are authorized.

The most important supply reference to use in conducting this inventory is Supply Bulletin 700-20. It lists Army-adopted items and other related items in alphabetical order or by line number matched with the applicable current reference. SB 700-20 can be found in DA Pamphlet 25-30, Consolidated Index of

Army Publications and Blank Forms, both of which are on microfiche. (If your hand receipt is maintained on an automated system, your PBO—given enough notice—can run a computer printout listing of all your nonexpendable items of property in line number order with the appropriate supply publications cross referenced.)

Next, obtain an up-to-date component listing on a Hand Receipt DA Form 2062 for every hand receipt item. Assemble an inventory file of notes and references, and study the results of earlier inspections to identify potential problem areas. Visit the battalion S-4 for more information on such things as budget status, property on order, shortage annexes, and the like.

Compare hand receipts to verify that the outgoing commander has properly sub-receipted all the property he is signed for. Tally all the sub-receipts to make sure they equal the number shown on the unit's hand receipt. If they don't, there is a problem somewhere. Annotate any



discrepancies you find so you can fix them later.

During this process, use your new XO and supply sergeant (three pairs of eyes are better than one) to help you check and inspect the accuracy and format of your unit's hand receipts. If you find that the hand receipts are incorrect, redo them immediately to save time and headaches later. (The senior man in each platoon, section, or vehicle should sign the hand receipt for his equipment. When the senior leader is made responsible, property accountability improves greatly, and your later 10% monthly inventories will go much more smoothly.)

At this point, recall all unit property. (The outgoing commander will probably recall the property and conduct his own inventory before the joint inventory to resolve any accountability problems and update recent property transactions.)

Schedule your inventory by type of equipment, not by sub-hand receipt holder. For example, plan to conduct a complete layout of all your unit's personnel carriers at one time instead of conducting individual platoon layouts separately. For one thing, this will keep one platoon from borrowing from another to cover shortages.

LETTER OF INSTRUCTION

Publish a change of command letter of instruction that lists all the key information, including dates, locations, times, references, responsibilities, and reconciliation procedures. Coordinate the schedule with the present commander to make sure sub-hand receipts will be present for the inventory. To receive more guidance, and to increase your own understanding of the process, brief the battalion commander and the key leaders on your concept of the joint inventory.

During the inventory itself, the property should be divided into three categories: organization property, installation property, and organizational clothing and individual equipment. If the outgoing commander is responsible for Class I and V basic loads and a prescribed load list, these items are also inspected.

The outgoing commander is responsi-

ble for seeing that all the property is laid out correctly and that equipment users and leaders are present with their sub-hand receipts.

Make sure a current component listing and a supply publication with illustrations of the items are on hand. If no pictures are available for an item, a good description with the item's dimensions will do. Take your supply sergeant with you and be sure he has the hand receipts, annexes, and the component listings along with his other records. Make annotations on the component listing.

Make the actual count yourself. Do not assume that an item is there just because it is supposed to be there. Make sure all COEI (components of end items), BII (basic issue items), and ITIAL (items troop installed or authorized list) are either on hand or on order. Inventory completely all sets, kits, and outfits (SKOs) instead of just seeing that they are present.

Make sure valid documents are available to account for the disposition of items that are not on hand—laundry tickets, maintenance work orders, and the like. Verify that all property exists and that it belongs to your unit. Check out equipment loss or damage as you discover it. Be suspicious when property is not physically located in the unit but is said to be in maintenance or on loan to a sister unit.

Make sure that vehicles are not dispatched, and that they are present on the day of their inventory. Have tools laid out for quick count against the appropriate manual or circular. Use any tool kit diagram mats that are available, such as the one in the general mechanics tool box, for example. Clothing and individual equipment often can be folded and stacked for quicker counting—sheets, flak vests, and the like.

Make sure that all unit property is listed on the hand receipt. The excess will be collected for turn-in, if applicable. Update and sign all sub-hand receipts at the completion of each type of inventory—NBC, arms room, tool truck, for example.

List all the problems such as shortages, mistakes, and unserviceable equipment, and verify the serial numbers on all sen-

sitive items. (Appropriate adjustment actions can be taken later.) Ensure that all component shortages are listed on hand receipt shortage annexes.

END ITEMS

Keep in mind that an item authorized by MTOE and CTA may also be a component of another end item. For example, a storage cabinet for tools and repair parts may also be authorized by MTOE as an end item while a similar cabinet may be a component of an end item. Stencil items with your unit's address to help mark them. (During the inventory is a good time to talk to soldiers about their knowledge of supply procedures. Note any property that is kept in a high state of maintenance so that you can recognize deserving individuals later. Your soldiers will appreciate your attention and concern.)

Do a reconciliation at the end of each day's inventory, and resolve any discrepancies at that time. Cross-level overages to fill valid shortages. (Excess property should be prepared for turn-in within 10 days after it has been identified.) When property loss or damage is discovered during the joint inventory, a report of survey should be initiated so that liability questions can be answered and relief-from-accountability actions can be started. Minor adjustments to hand receipts, such as correcting serial numbers, can be made with an administrative adjustment report. Review the progress of your inventory daily.

The final step in the process is the post-inventory reconciliation, in which you compare your hand receipt with the sub-hand receipts to verify that all the property is accounted and signed for. This is a time consuming but necessary task.

Make sure all shortages are deducted from the hand receipt balances before signing the receipt. Do not accept the outgoing commander's inventory shortages without written documentation. He is the one who is liable for them.

When you are completely satisfied that you have accounted for all of the unit's property, sign the commander's property hand receipt. Then, along with the

outgoing commander, prepare an after action review on the joint inventory and brief the battalion commander on the results.

Using this three-step method, you will be able to conduct a good joint change of command inventory and assure 100

percent property accountability. When the inventory is completed, you will know what property your unit has, where it is, and who is signed for it. Then, as you receive the unit's guidon, you will be confident that your first mission as a commander has been successful.

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Drewry's Bluff

A Blocking Position

CAPTAIN KEVIN J. DOUGHERTY

A blocking position (according to Field Manual 101-5-1, Operational Terms and Symbols) is "a defensive position so sited as to deny the enemy access to a given area or to prevent his advance in a given direction."

The mere denial of an enemy avenue of approach is not an end in itself, though; a unit will usually be instructed to establish a blocking position as part of a larger operation. For example, a reserve unit may be ordered to establish a blocking position to secure a flank or rear until the situation develops and the unit is committed to the attack. Likewise, a fixing element may be tasked to establish a blocking position to allow a maneuver element to envelop the temporarily halted enemy.

Because Soviet offensive doctrine is characterized by a high rate of advance to develop penetrations leading to the enemy's rear, all units must be prepared to establish effective blocking positions.

The success of a blocking position depends upon three key factors: a detailed analysis of the terrain and enemy intentions to determine likely avenues of approach; the careful use of natural and manmade obstacles to channel the enemy into the engagement area and prevent a bypass; and the accurate emplacement of

key weapons to bring the greatest possible firepower to bear on the enemy while still affording the best protection for friendly forces. If these prerequisites are met, a blocking position does not require lengthy preparations or a large force.

A good historical example of a blocking position, particularly one that did not have the benefit of extensive time to prepare and a lot of resources, is the one at Drewry's Bluff during the Civil War.

RIVERBEND

Drewry's Bluff, sometimes called Fort Darling, was a small earthen fort that Chesterfield County, Virginia, farmers had begun constructing in 1861. Lightly defended and only partly finished, it stood less than eight miles south of Richmond, Virginia, on the James River. Fortunately, at this point the river bent sharply to the east for a short distance and then turned again to the south.

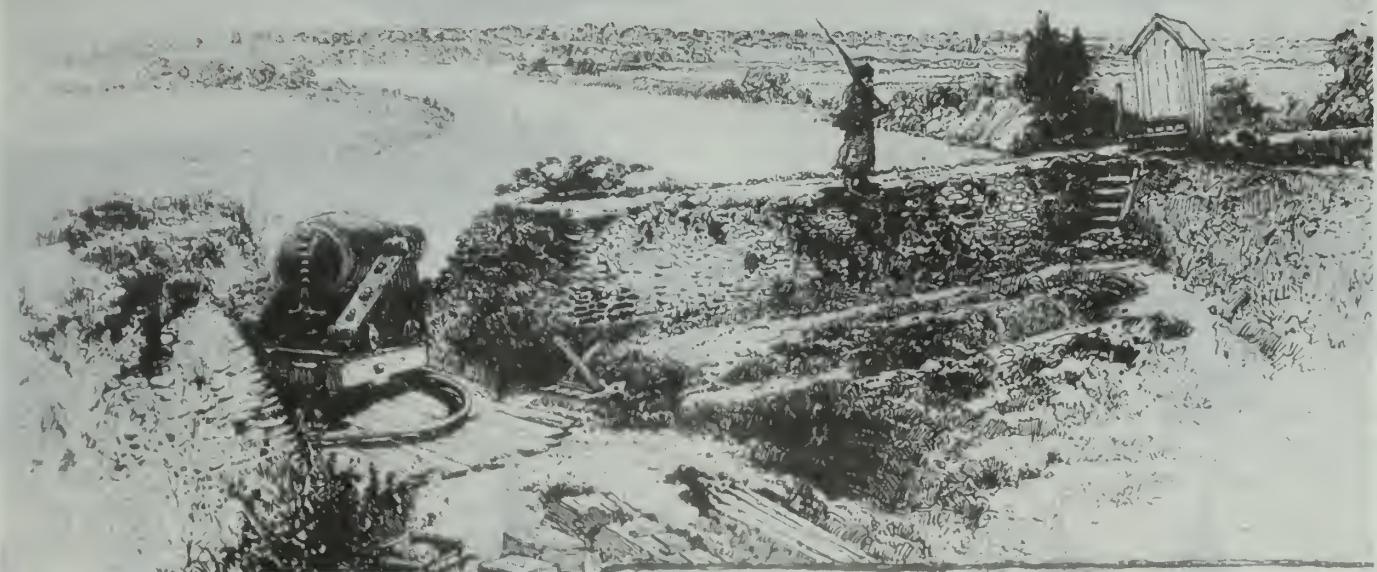
The work on the fort had been haphazard, but in May 1862 the unchecked Union advance gave the workers a new sense of urgency. In fact, the fort was the last line of defense protecting the Con-

federate capital from a flotilla of Union gunboats.

The likely enemy avenue of advance was the James River, which ran between Hampton Roads and the Union objective of Richmond. Union commander General George McClellan had shipped his 150,000 troops from Alexandria to Fort Monroe and had then begun a methodical advance toward Richmond in his long-awaited Peninsula campaign. His plan was to send the Union Navy to open up a river route to Richmond as other naval forces had earlier opened such a route to New Orleans. The Confederate commander, General Joseph Johnston, had withdrawn every step of the way until his troops were backed against Richmond and there was simply nowhere else to go.

The first step for the Confederates to take at Drewry's Bluff in May 1862 was to improve the natural obstacle created by the bend in the river. They sank several stone-laden hulks and drove piles at critical points to narrow the channel. Now, any Union gunboats making the turn would have to expose their flanks to the fort. The river banks themselves prevented a bypass.

The Confederates then placed guns from the scuttled ironclad *Virginia* and other weapons 100 feet above water



Fort Darling at Drewry's Bluff, looking down the James River.

level, knowing that the Union gunboats would not be able to elevate their guns high enough to hit them. Consequently, on 15 May, a Union force of five vessels, including the ironclads *Monitor* and *Galena*, proved no match for the defenders. The *Galena* alone was hit 43 times.

The Confederate success at Drewry's Bluff checked the Union advance only temporarily, but for the time being at least, Richmond and the Confederacy were saved.

As at Drewry's Bluff, a blocking position can be used wherever the enemy can

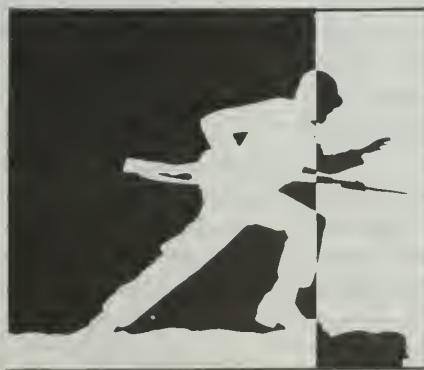
be isolated on a single avenue. The defenders must use a combination of natural and manmade obstacles to channel the enemy into an engagement area and prevent him from bypassing it. They must also carefully place their weapons so they will destroy the enemy while protecting the friendly forces.

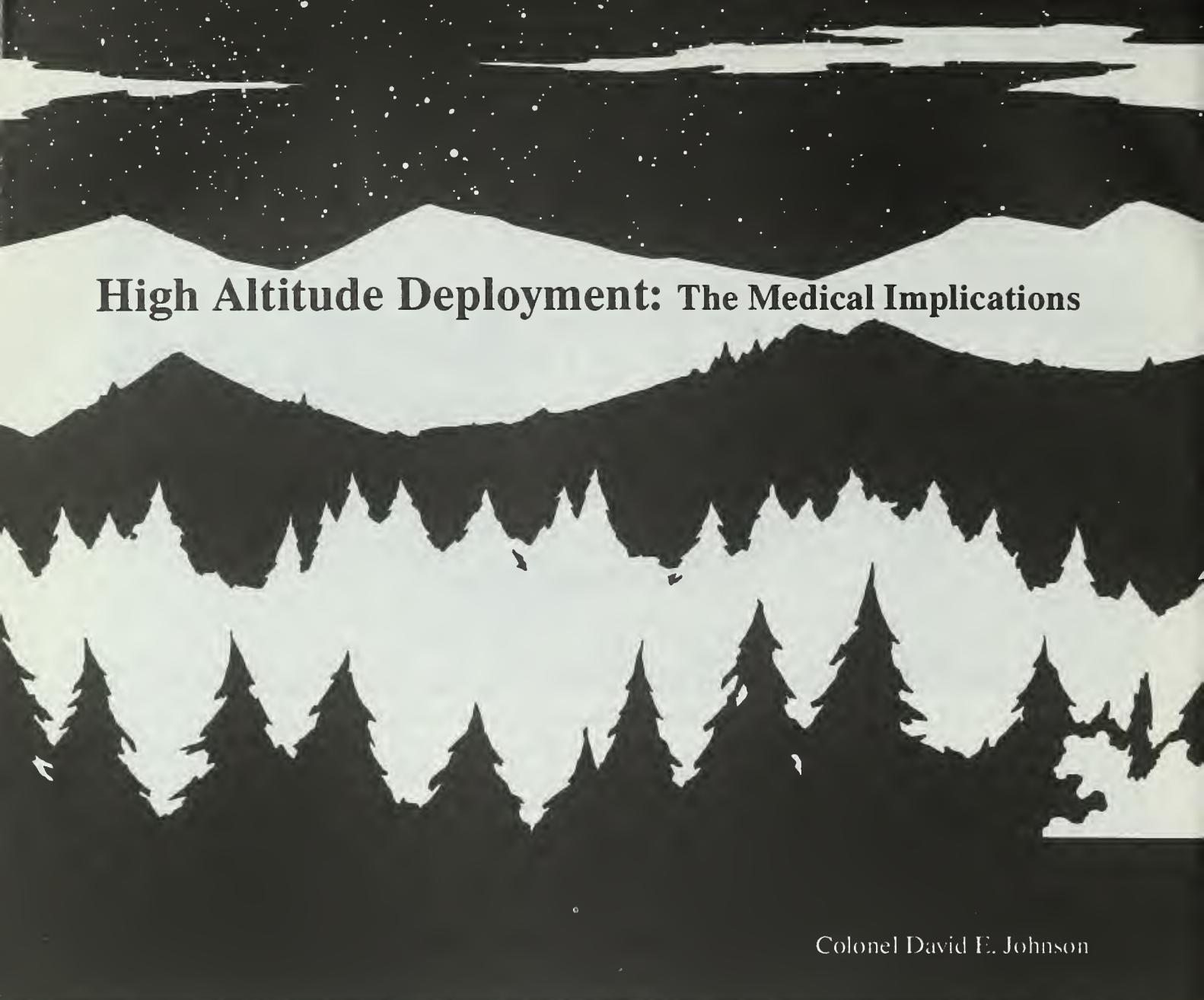
A blocking position has quite specific applications to urban areas, where the enemy avenue of advance is not a river but a high-speed road. The natural obstacles are not sunken hulks but car cribs and minefields. The weapons are placed not on a bluff but in key buildings adja-

cent to the road. And once a blocking position fixes the enemy, a maneuver unit can flank and destroy him.

Whether along a river, in a city, or even in a narrow mountain pass, a blocking position has useful applications and should be carefully considered.

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High Altitude Deployment: The Medical Implications

Colonel David E. Johnson

On 20 October 1962, military forces of the People's Republic of China assaulted defensive positions occupied by Republic of India forces at Thaga-La in the Himalayas and in a matter of hours totally overcame those defenses. As a result, India lost a great deal—territory of strategic value, manpower and equipment it could not afford to replace, its international position as putative leader of the non-aligned movement and, perhaps worst of all, the self-respect and self-confidence it needed to function smoothly as a democratic nation.

Many factors contributed to the defeat suffered by the Indian forces, including the Chinese Army's better logistics, perhaps better leadership and organization, and some level of superiority of numbers. Still, a significant portion of the blame must be laid on the fact that the Indian soldiers were not physically capable of performing their assigned mission.

To meet the Chinese threat, the government of India had dispatched to the mid-Himalayan frontier (4,000-4,500 meters in altitude) troops from the interior of the country who were not acclimated to high altitudes. Although these may well have been the only troops available, as events were to demonstrate, they were to suffer grievously for their unprepared state.

Unfortunately, what is medically known about the acute effects of a rapid ascent to high altitude is primarily confined to arcane medical journals and the memories of some specialists. But the ones who need this information most are military commanders, staff officers, and planners who are responsible for either ordering or conducting such deployments.

Nearly one-third of the world's land surface is dominated by mountains, especially in such disputed and volatile areas as Central America, South America, and south and central Asia. More than 125 separate mountains of 3,000 meters in

elevation and higher are located on every continent and in nearly any geographical sphere where the deployment of U.S. forces is conceivable. Many, if not most, international borders in these areas are remote and in dispute; even in cases where the exact lines are agreed upon, those borders are less than totally defensible.

The U.S. justly prides itself upon its rapid deployment and force projection capability. The Army's formation in recent years of new light divisions with world-wide missions indicates its current appreciation for a timely and credible U.S. presence at a potential point of disturbance.

In spite of these intentions, however, there are significant deterrents to the rapid deployment of U.S. forces to an area of high elevation. Not the least of these is the physical condition of the soldiers who would be sent into such an area.

In a rapid ascent to elevations above 3,000 meters, almost everyone is affected to some degree by the illness that has become known as "acute mountain sickness." Some individuals (estimates vary from 2 to 15 percent) will be severely affected, perhaps to the point of death; nearly all personnel will suffer a marked decrease in physical capability. A 60 percent reduction in work capacity is to be expected and this percentage may be even higher, depending on the elevation changes.

An Indian authority, speaking in 1967, had to admit, "Because of our commitments in the Himalayan terrain, troops are shuttled frequently between the sea level and 18,000 feet... In the last 5 years, over 2,000 [soldiers]... were incapacitated with the illness."

PHYSICAL CONDITIONING

Physical conditioning before ascent has no preventive value against the development of the illness. In many cases, young and energetic, but "heavily built" or perhaps overweight, soldiers appear to be the most susceptible to the life-threatening complications of acute mountain sickness.

Almost all individuals, at least temporarily, will have a headache severe enough to inhibit any level of sustained concentration. Reading, satisfactory marksmanship, or the "what if" type of deductive logic will prove difficult if not impossible. Shortness of breath, nausea, and dizziness will affect nearly everyone to some extent. Insomnia and nightmare-laden, frequently interrupted, short sleep periods are to be expected.

Short term memory will be severely degraded, a deficit that is especially critical in small unit leaders. Night vision capability will be markedly reduced and, in a few soldiers, the field of vision can be restricted. Loss of appetite and inadequate attention to thirst is routine. Leaders are no more immune to these effects than their subordinates.

The soldiers themselves are usually unaware of their decreased performance and altitude-induced deficiencies. Worst of all, leaders may be fully aware of their soldiers' limitations but remain fully convinced that they themselves are unaffected, thereby compounding an already difficult situation for the soldiers.

These symptoms begin about 6 to 48 hours after a unit arrives at high altitude and last from about four days to a week. Usually the symptoms will disappear in spite of anything the soldiers do or do not do, but during this period of time a unit will be largely ineffectual—and vulnerable.

For example, the Indian commander at the incident cited earlier noted, with chagrin, that before the battle "the efforts of our troops to cut logs with entrenching tools and shovels were pathetic and openly derided by the Chinese who could see us."

Only a few individuals will be capable of hard physical labor such as digging foxholes or clearing brush for fields of fire, and they will be slow in doing so. Both sustained heavy exertion and efforts that require sudden violent movement will be affected. Thus, patrolling will suffer from lack of attention to detail and also from lack of energy for prolonged efforts. Rapid maneuver will be difficult because the soldiers will be less efficient in loading and unloading equipment.

In contrast to the soldiers' reasonably rapid recovery from the symptoms of acute mountain sickness, however, its debilitating effect on their physical efforts will not soon, if ever, allow a return to lowland performance. Their ability to respond to a need for a sudden burst of strength will usually return in a matter of weeks, but a total sustained effort on their part may not return for years.

DISABILITY

During this period of disability, a unit commander's role must be primarily supportive. He must insure the availability of water and palatable, carbohydrate-rich food; he must encourage soldiers to drink and eat; and he must provide for the medical care they need.

He may have to closely regulate the consumption of alcoholic beverages, because alcohol will be metabolized more slowly during this period, and it may also cause a considerable loss of body heat.

He should let the soldiers know that he will limit the duration of the jobs that depend upon mental concentration, and that he will give them more time to complete tasks that require strenuous physical activities.

As the leaders will be undergoing this period of potential disability at the same time, some degree of external command and control (that is, from leaders who are not subject to the stress of acclimatization) should be considered for a period of two to three weeks following a unit's deployment.

A few individuals, for unknown reasons, will be particularly sensitive to the manifestations of "high altitude pulmonary edema," which may be life threatening. In addition to the symptoms noted above, some soldiers will develop a fluid build-up in the lungs (or, more rarely, in the brain) that is virtually untreatable except by a return to a lower altitude. Recovery is routine if the return is fast enough, but those individuals may subsequently develop a severe illness even during a gradual transition from lower to higher altitude. Accordingly, rapid ascent is presumed to predispose them to



a recurrence of the initial illness. Other predisposing factors include strenuous physical exertion, anxiety, and exposure to cold, the very factors they are most likely to face in combat.

Since returning the affected soldier to high altitude is likely to result in a repetition of the problem, the productive return of this soldier should not be expected. In fact, if he is evacuated, he should be considered lost to the unit.

Currently, there is no way to identify these sensitive individuals before deployment, except by their medical histories. According to a report from the Himalayas, one Indian medical officer "had to deal with an average of 30 to 40 new serious cases every day, and placed some 8 to 10 men on the 'dangerously ill' list. Almost all the cases were due to pulmonary oedema." This was out of a force smaller than most U.S. infantry brigades. In addition, when crisis decisions needed to be made, the senior officer the Indian government most depended upon to advise it regarding the conditions at the point of confrontation was in New Dehli disabled by the high altitude pulmonary edema he had acquired on the border.

The U.S. Army field manual on mountain operations (Field Manual 90-6) calls for troops to be acclimatized for operations above 2,500 meters. In the past, a wide range of measures have been tried to establish predeployment acclimatization and, thereby, to reduce the seriousness of acute mountain sickness. Most achieved only limited success, if any at all.

Over the past 20 years, much of the research has been aimed at finding a drug, or a combination of drugs, that will prevent the illness and allow a respectable level of troop performance at high altitudes. A common diuretic, furosemide (brand name, Lasix), has been used in India with only mixed results. (A diuretic is a drug that increases the excretion of fluid from the body. Urine output increases soon after taking the drug.) Another diuretic and anti-seizure medication, acetazolamide

(brand name, Diamox), has been shown in U.S. studies to have limited value. At best, diuretics can be expected to reduce the symptoms of acute mountain sickness by 20 percent or less, and the resulting dehydration makes the drugs potentially self-defeating.

Morphine and codeine have been tried with some benefit, but again, the usefulness of soldiers who are treated with these drugs must be weighed against their usefulness if they are not treated. Steroids have been used to try to prevent acute mountain sickness, and if the Indian deployment in the Himalayas occurred today most (but not all) experts would recommend giving the soldiers a combination of steroids and acetazolamide before they moved to the higher altitudes. At best, though, this would be effective in less than half of the soldiers deployed.

In addition, since neither of these drugs is totally benign, they would have to be prescribed on an individual basis. Most of the conditions for which the drugs would not be prescribed—such as kidney or liver disease—are usually not present in a young and healthy military population. Nearly all soldiers, therefore, should eventually be able to take the regimen. Nevertheless, it would be necessary to check for those rare conditions, and this would be time consuming. For the foreseeable future, then, predeployment treatment offers little relief from the problems a unit can expect to encounter if it is deployed rapidly to high elevations.

To get troops to a high battlefield, the Army will have to acclimatize them in one of two ways: Station soldiers at high elevations for long periods so that they become acclimatized in anticipation of deployment (for example, large forces of the Chinese Army had been stationed in Tibet for years before the war with India), or deploy units through a series of stages at progressively higher elevations.

Currently, the U.S. has no cadre of acclimatized troops, and it has no installations at high elevations at which a significant number of combat troops can be positioned for long periods of time. Fort Carson, Colorado, at an approximate elevation of 1,900 meters, is the best that is presently available, and the soldiers assigned there can be expected to have a marginally increased heart and lung efficiency. But that elevation is still too low for them to become acclimatized to higher altitudes. Smaller numbers of troops can be maintained on facilities at Pikes Peak, Colorado (4,300 meters), Mauna Loa, Hawaii (4,170 meters), or Pickle Meadow, California (2,079 meters). Unfortunately, these are not large enough to hold a significant number of soldiers; they could be used as staging areas, however, along with certain of the mountain resort communities in New England and the western United States.

Acclimatization through progressive stages would require a scheduled stop at an intermediate altitude of about 2,400 meters before going above 3,000 meters and subsequent layovers every 600 to 900 meters after that before arriving at the desired deployment site, with at least a two-day stopover at each stage. In other words, the deployment to the site of the Indian-Chinese battle at Thaga-La (approximately 4,400 meters) would require at least eight days with intermediate stops at 2,400, 3,000, and 3,700 meters.

Other authors have suggested longer stops at less frequent intervals or smaller incremental steps, but in all cases a significant lag is necessary between the beginning of the deployment and the commitment of troops into combat. Simply loading troops on aircraft at Fort Bragg, for example, and off-loading them in the theater of operations with the expectation of immediate employment is not feasible. The location of staging areas is critical, and suitable staging facilities should be a condition of the acceptance of any invitation from a host nation.

Ideally (and necessarily if altitudes greater than 4,500 meters are expected), staging should be accomplished as close to the site of operations as possible. During this staging period, the time can be used for equipment checks, final training, and last-minute briefings, but it should not be used for strenuous

physical activity or exertion. Similarly, troops should not be committed to active operations immediately after they arrive at the final deployment site.

Early in such deployments, more medical and evacuation personnel and equipment need to be included to treat the inevitable illnesses and to quickly spot soldiers who cannot tolerate extreme elevations. Under no circumstances should leaders expect standard lowland performance from their soldiers.

By paying attention to eating and drinking requirements, early deployment drug treatment, and especially the rate at which the soldiers are moved from a lower elevation to a higher one, a commander can reduce the acute effects of mountain sickness. Nevertheless, he must take into consideration the significant decrease that will take place in the ability of his soldiers to fight.

One of the men who recorded the Indo-Chinese conflict wrote:

Some officers and men who were rushed to the Dhola area succumbed to the hazards of the mountains (as opposed to the fighting itself), fell ill, and took no further part in the proceedings. It is foolish to ignore the problems of living in the mountains, at heights above 9,000 feet. In this respect we must emulate the Monpas [a local Himalayan tribe] who move slowly, rest frequently, and undertake short daily stages. Over the centuries they have developed the physique and lungs for surviving in the Himalayas. Commanders who later ordered forced marches, day after day, and who otherwise drove troops beyond human endurance, only courted disaster.

This report may be the best possible summation of the medical military aspects of high altitude operations.

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Thoughts

on Being A Battalion S-3

Captain Walter F. Ulmer III

Many formal sources of "how to" information are available for battalion staff officers, especially for those who are assigned as the operations officer. Field Manual 101-5, Staff Organizations and Operations, for example, outlines specific staff responsibilities. The Combined Arms and Services Staff School gives Army captains an insight into staff operations at the brigade, division, and corps levels. The Command and General Staff College prepares captains and majors for the many challenges they will face as staff officers.

But little seems to have been written to show current "grass roots" perspectives on life as a battalion S-3. I would like to share such a perspective, based on my recent experience in that position. The following remarks are not meant to be a recipe for success, but rather to examine some of the earthier aspects of the job.

A new S-3's first step toward becoming effective in the job is to define his professional relationship with the battalion commander. Since command is highly personal, commanders take different approaches in guiding their units. Some choose a passive method, leaving their staff members free to develop the battalion scheme of maneuver; others are more active in their approach and expect more conformity.

Whatever his commander's method may be, the S-3's relationship with him, if it is to be effective, must be a close one. The S-3 must develop the ability to anticipate the commander's wishes and to plan accordingly. And in the absence of clear guidance, he must be confident he is correctly executing the commander's intent.

Flexibility is the key to success in this relationship. The commander will undoubtedly be more active in planning some events than others. An effective S-3 will identify this tendency early and temper his involvement accordingly.

The fact that a commander does not get personally involved in a certain event does not lessen its importance. (Most commanders realize that they can give their personal attention only to certain selected matters.) Sometimes, all the S-3 will have to do is to fill in the missing pieces. At other times, he will receive specific guidance to use in formulating a plan. Ideally, the S-3 will be able to catch the nuances of his commander's broad brush strokes and prepare a workable plan.

Early in an S-3's tenure, too, he will find that other relationships are critical to his success. First, the battalion executive officer (XO), as staff coordinator, will work with him on a daily basis. The formal link between the two officers will depend on the commander's desires. In some battalions, the S-3 works directly for the commander; in others he answers to the XO. The S-3 will handle some actions exclusively, of course, but most will require coordination with the XO.

An initial session between the S-3 and the XO to define roles and limits of responsibility will be time well spent. Regardless of the S-3's rating scheme, there can be no turf battles. Continual interaction between these two principals is essential to staff effectiveness.

Although the XO formally coordinates the staff, the S-3 will informally coordinate his actions with the other staff officers in the battalion. I discovered quickly in dealing with fellow staff officers that they would protest loudly if they thought I had cut them out of my decision making process. Fortunately, this reminded me of the need to include as many staff officers as possible, time permitting, in the planning cycle. Additionally, it allowed the staff to use much the same planning scheme it would use both in garrison and in the field.

Another aspect of my relationship with the other staff officers evolved more slowly. As they developed approaches to solving their own issues, they would use me as a source of feedback on their plans before introducing them to the battalion commander or the executive officer. It was good to be able to help them mold their ideas, and it also kept me abreast of other staff issues within the battalion.

The S-3's relationship with the command sergeant major (CSM), though less formal than his association with the XO, is no less important. A sergeant major can play a crucial role

in the battalion, and through daily chats with him the S-3 can gain insight into ways of dealing with battalion business.

The S-3 must also encourage continual dialogue between the CSM and the operations NCO, because these two are routinely recognized as being the battalion's taskers. Conflicting guidance from them can create havoc for subordinate units.

The S-3 will spend a lot of his time dealing with the line company commanders in the battalion, and these are important relationships. Since most S-3's have previously served as company commanders, they have some idea of how subordinate commanders think. Almost universally, for example, company commanders are interested in the way the S-3 is developing their training input. Although it may be a humbling experience for an S-3 to receive their critique on the development of the battalion training plan, that very commentary is essential to the success of the next plan.

It is imperative, however, that company commanders execute the final plan. (Staffs plan, commanders execute.) They have the appropriate mind set, the authority, and the resources to accomplish the mission effectively. Fixing responsibility on subordinate commanders will produce a better product every time.

The S-3 can make distasteful taskings more palatable by calling the commanders ahead of time to warn them of upcoming taskings.

HHC COMMANDER

An S-3's dealings with the headquarters company commander (HHC) will differ markedly from his dealings with the line commanders.

First, the HHC commander owns the resources the S-3 must have to execute his daily mission, and the S-3 is responsible for seeing that both the soldiers and the equipment are cared for. Although the operations NCO and the HHC first sergeant will deal routinely with this issue, the HHC commander and the S-3 may have to intervene occasionally.

Since the S-3 may be too busy to oversee the daily garrison training of the specialty combat platoons (scout and mortar), many battalion commanders give this responsibility to the HHC commander. In the field, however, these platoons fall under the control of either the S-3 or the battalion commander himself. The HHC commander and the S-3 must therefore ensure a smooth transition for these platoons between garrison and field operations.

I was fortunate to work with an HHC commander who took a special interest in the scout and mortar platoons. Together, we developed their garrison training schedule, and he supervised its execution. Although I occasionally dealt directly with the platoon leaders or inspected their training, he was their boss at home station. And in the field, he visited the platoons to check their progress as I had done in garrison.

Finally, the S-3 must be especially prudent in tasking the HHC, because the supporting nature of this organization tends to make it the recipient of numerous one- and two-man details. While the line company commanders will make sure the HHC

commander is getting his fair share of the work, the S-3 must develop a tasking plan that also takes into account the company's routine duties.

One of the battalion S-3's relationships outside the battalion is worthy of note—that with the brigade S-3. If there is to be continuing rapport between these two officers, they must cooperate from the beginning. They must achieve a balance between what the brigade S-3 considers appropriate for the brigade and what the battalion S-3 considers appropriate for the battalion.

A system of "chits" is likely to result. As the battalion receives its fair share of tasking (and also picks up some short-fused taskings as "favors" for the brigade), the effort will be recognized and taken into account later. Battalions that routinely fight the brigade staff are not helping themselves and, in the long run, are usually left with the less desirable missions.

If he establishes good relations from the staff with the brigade S-3, the battalion S-3 will get early warning of future division events. This should help him reduce the effect of upcoming division requirements on his battalion's training.

S-3 Resources

One of the topics of discussion during the battalion S-3's initial session with the commander should be the resources for the S-3 section—both personnel and equipment.

Although I would not have had the same opinion during my company command, I have come to feel that the current modified table of organization and equipment (MTOE) of many line battalions does not give the S-3 enough resources to conduct sustained combat operations. Although discussing this controversy will not solve any of the Army's MTOE issues, it will help build a mutual understanding of the assets that will be allocated to the S-3.

Two philosophies define the boundaries of this discussion: The first is that staff sections should be given as little manpower as possible, while the line units should be given as much as possible. This perspective focuses on the battalion's fighting equipment as the sole element in its combat arsenal.

The second philosophy is that staff sections in the battalion should be given enough assets to sustain continuous operations and to provide redundant command and control measures as well. The credibility of this approach has been reinforced frequently by the relative success of units rotating through the National Training Center (NTC). The units with "stacked" staffs have routinely provided better support to their subordinate units.

This philosophy applies to garrison operations as well. A few extra people in the S-3 section to ensure a good product to meet short-fused briefings, panic displays, and no-notice taskings will let the rest of the battalion carry out scheduled training with fewer distractions. Additional personnel will also allow the section to take better care of its equipment. As a result, the S-3 will be better able to help the subordinate units within the battalion, and the battalion commander will be better able to measure the quality of training within his unit.

The S-3's initial conversation with the battalion commander should also include the quality of the soldiers and the length of time they are to be assigned to the section. Many S-3 sections are jokingly referred to as "hotels," because they are filled with transient soldiers, personnel assigned temporarily to the battalion for various reasons, or soldiers who have been identified as under-performers by the line units.

Obviously, an S-3 would like to build a team that has a certain amount of stability. On the other hand, accepting the challenge of using "temporary hires," or soldiers who have had a difficult time in line units, can produce surprising results. A soldier who is not quite making it as a Bradley commander, for example, might be just the one to keep an eye on the conduct of fire trainer or prepare briefings. Potentially creative thinkers have been known to blossom in S-3 sections and make worthwhile contributions. An initial heart-to-heart talk with new section members to clearly define their responsibilities will allow an enterprising S-3 to reap unexpected dividends.

At the same time, he should lobby for soldiers with a realistic mixture of abilities and try to establish both a minimum and a maximum assignment length for the soldiers in the section.

Each battalion allocates equipment to its S-3 section differently, depending upon where the commander plans to use his S-3 on the battlefield. In some tank battalions, for example, the commander puts his S-3 in his wing tank. In others, the commander stations his S-3 in the tactical operations center (TOC). Some commanders in mechanized infantry units allocate an additional M113 to the S-3 section, outfit it with additional communications equipment, and use it as a "jump" TOC or forward communications relay platform. The S-3's location in a light infantry battalion will greatly affect the distribution of the battalion's precious secure communications equipment.

Whatever equipment is allocated, it must be manned. There is no point in requesting vehicles or radios that cannot be manned or that will not be used regularly.

Organization

The S-3 must see that the section's equipment and personnel are properly cared for. Without specific emphasis in this area, a staff section tends to become absorbed in servicing the battalion's subordinate units while neglecting its own assets.

Fixing responsibility for this task on one individual will make it more manageable. The soldier who assumes these duties will probably not be the operations NCO, who is usually busy coordinating with the brigade and the companies, as well as insuring the efficient day-to-day functioning of the section. I used the assistant operations NCO and it worked well. This responsibility needs to be fixed early, if it has not been established by the previous S-3, to avoid potentially embarrassing situations and to improve the readiness of the soldiers and equipment.

It is no great secret that periodic coaching sessions make any organization more effective. It is imperative that each member of a team fully understand his duties, and that these



responsibilities be reinforced periodically.

To reinforce this concept, I had a team-building session about every three months. I assembled all the officers and non-commissioned officers in the section and conducted a sensing drill. On a blank sheet of butcher paper, each of us would list his significant duties and responsibilities. I would begin with mine, and we would work our way down the S-3 "chain of command." As we progressed, we would highlight specific problems encountered in the daily execution of our tasks and the steps we were taking to overcome them.

These exercises helped our section in a number of ways. First, it reinforced each individual's perception of his job. Second, it gave me an opportunity to refresh my perspective of where we were headed, as well as an opportunity to refine what I felt were each player's primary duties. Third, it reinforced each soldier's understanding of the section's importance within the battalion. Finally, it provided a degree of cross training—the soldiers learned first-hand the duties of their fellow team members and were better equipped to route questions addressed to the section to the person responsible for the action. In retrospect, these sessions proved invaluable to the section's functioning and left us with a clearer outlook on our individual duties and our collective direction.

In some cases, a new S-3 may inherit an organization with which he feels comfortable. In others, he may recognize a need for restructuring. If he walks into a functioning operation (as most S-3s do), though, he must think carefully before making big changes.

Major dysfunctions in the section will be obvious and will require immediate attention. Less visible problems will surface

more slowly and, as in most organizations, will take longer to solve. Structuring an organization around the various personalities in it is not a new concept, but task organizing the section with clearly defined duties is important to success.

A new S-3 might first consider his own role. He should be looking over the next mountain range instead of just over the next hill. He should be conceptualizing, articulating, inspecting, proofreading, and directing.

Rarely, if ever, did I set pen to paper in preparing letters of instruction, standing operating procedures, or training schedules. Instead, I formulated orders, plans, and the like as far in advance as possible (understanding that changes in plans were not only possible but inevitable) and then had my subordinates prepare the actual documents.

An S-3 may choose to save certain tasks to do himself. One example is the battalion's planning calendar. Whatever the structure of this important tool, there must be only one funnel for scheduling events. While I hoped to create an atmosphere of open communication that would allow for the addition and deletion of events on the calendar, I guarded this document carefully and routinely checked it for conflicts.

Responsibilities

Once an S-3 feels comfortable with his own responsibilities (and has carefully explained them to his subordinates), he needs to examine his subordinates' responsibilities. It can be a real challenge to assign jobs according to personalities, job descriptions, personal desires, and longevity. A few guidelines make this task easier.

First, the S-3 must clearly delineate responsibilities and duties, making sure each soldier in the section is assigned duties commensurate with his potential. I quickly realized that a stated job title does not always describe the duties of a given position. For example, the S-3 Air was not just the close air support coordinator. (That job occupied only about one-fifth of his time in garrison.) He was also the ammunition officer, the plans expert, the Army National Guard and U.S. Army Reserve (or partnership) officer, the athletic kingpin, and the maneuver area planner.

The second rule of thumb is equally important: The S-3 should assign jobs according to the longevity of the soldiers in the section. He should let the transient soldiers routinely tackle events that do not tend to recur. I used them for the special events that cropped up sporadically (spring clean-up, special ceremonies, one-time moves, and the like). They seemed to appreciate working on projects they could complete during their tenure. There is nothing more frustrating for a staff officer or NCO than to start a project knowing he will be gone before it is completed.

The permanently assigned soldiers should be responsible for the recurring events (gunnery, NTC, periodic sports days). The historical perspective they gain by working on these events more than once will enable them to do a better job and will provide more stability in an inherently unstable system.

Finally, the S-3 should assign internal section suspenses and make sure they are met. The hectic pace maintained in many battalions makes it easy to wait until the last minute to perform a task. An effective operation cannot tolerate missed suspenses.

I used a suspense roster to track all S-3 actions. In addition to suspense dates, it included in-progress-review dates for the actions that required more time and listed the name of the individual who was responsible for each action.

We frequently updated the roster to highlight the projects that had been completed as well as the actions that had received deferred suspenses. As the roster became a working document in the section, it routinely established priorities for suspenses and increased the frequency with which those suspenses were met.

Information Management

Another important matter to an S-3 section is information management. Information is power, and the management of different types of information is critical to an S-3 section's success.

The first type of information might be called internal—the information that is passed between section members. As a company commander, I had two major problems with the battalion staff. The first involved getting people to return phone calls. Too often, when I asked to have a call returned, I would have to call again, only to learn that the person I needed to talk to had never received my message. The seemingly simple task of receiving, transferring, and returning phone calls in an office is more difficult than it appears.

I fought this battle through the sensing sessions and on-the-

spot corrections. I gave particularly firm guidance to those people in the section who had trouble taking correct messages. Gradually, the problem lessened, but frequent reinforcement was required to keep it under control.

A second internal information problem stemmed from the section's compartmentalized structure. Earlier, when I was a company commander, I would become frustrated when a person I reached in the battalion S-3 section could not answer my training-related questions. As an S-3, however, I soon realized that those expectations may have been too high.

As in most organizations, some specialization in the S-3 section is necessary. The soldiers assigned can reasonably be expected to become subject matter experts only in certain areas. The schools NCO, for example, is primarily concerned with schools and the master gunner with gunnery.

The cross-training provided by the team-building sessions gave the soldiers in the section a rudimentary understanding of each others' duties. But it did not provide the depth necessary to allow everyone to be familiar with all the working actions. At best, the S-3, S-3 Air, operations NCO, and assistant operations NCO should be conversant with most issues. If the rest of the members can be taught to steer incoming calls to the right people, the section will be successful.

The second type of information an S-3 will deal with is that flowing into the section from outside sources. The amount of external information available to an S-3 can quickly become overwhelming. Disaster lurks in situations where members of the section receive external directives and respond to them without the S-3's knowledge.

An S-3 must establish a system that allows him to keep abreast of current issues without experiencing "information overload." In the beginning, I handled this nemesis by demanding that all the information that came into the section be routed through my "IN" box. After the first time I came to work and peered over the 350 19K SQT notices that the operations NCO had dutifully placed in my box, I changed my guidance slightly to screen out some items I obviously did not have to see.

By filtering the paperwork, I was able to keep current on most issues. I established a personal desk file of working issues I needed to find quickly. I would look over other incoming items as necessary, provide marginal notes if appropriate, and send them on their way through the S-3 labyrinth. Surprisingly, I established a reasonable recall for items I had seen. While this system incorporated some techniques of micromanagement, I found it necessary if I was to keep abreast of current issues.

The third type of information the S-3 section must handle carefully is that generated by the section itself and passed to outside offices, units, and people. Obviously, information sent to the battalion commander is critical. I found that if I informed my commander of every action in which I was involved, I would spend all of my time receiving information and passing it to him, and he would be the one to experience "information overload."

Therefore, I filtered the information I would send to him

on the basis of what I thought was important and what he had indicated that he was interested in. As I got to know him better, I became more adept at providing him worthwhile information in a timely manner. I learned to pass both good and bad news quickly, regardless of the reaction I might receive.

Information passed on to others by members of the S-3 section is critical to a battalion's success. But it must be correct information. The line units, in particular, rely heavily on this information. Its management might better be described as "the minimization of misinformation." A first sergeant who phones the S-3 section and is given an incorrect time or location for a battalion formation is put through a needless drill. More important, such a drill wastes a lot of his soldiers' time.

Soldiers assigned to the section will often try to satisfy customers by providing as much information as possible. Unfortunately, though, their well-meaning efforts can be counterproductive. Combating this tendency without dampening their spirit is tricky. The coaching sessions provide an opportunity to reinforce the point that it is better to give no information at all than to give information one only *thinks* may be correct.

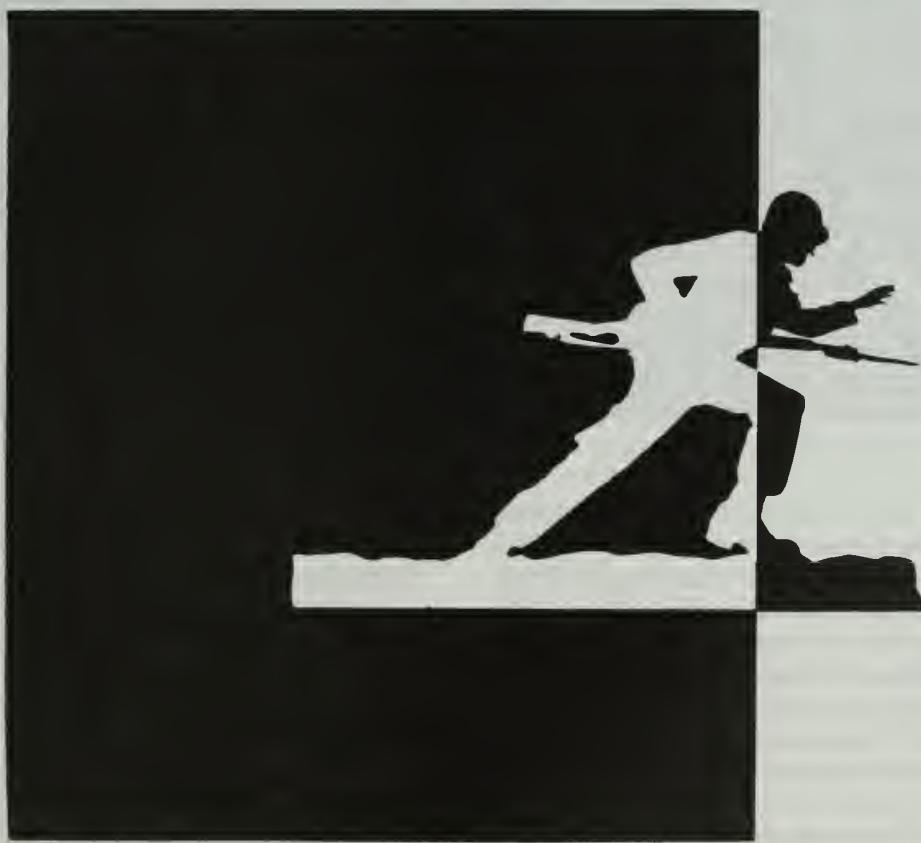
I spent a lot of time fighting the battle against misinformation. Incidentally, it was interesting to discover what different

people defined as "coordinating" with the S-3 section. A CQ runner's call to the S-3 clerk-typist was all some leaders needed to state assuredly that they had conducted the required coordination with the operations office.

Finally, there is a debate today on whether a battalion S-3 should be a captain or a major. It is true that a major normally has a broader depth of experience. Unfortunately, many majors are thrust into S-3 roles after an extended period away from line units. Thus, a captain fresh from command may have less experience but may be more receptive to the needs of the company commanders in the battalion.

In the end, it probably does not matter. Each S-3 will bring to the job his own perspective. Many successful battalions view the S-3 and his section as the unit's hub. Life as an S-3 is therefore hectic, but also challenging. Hopefully, this discussion will assist others when it is their turn to enjoy the challenge of being an S-3.

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THE 8TH INFANTRY DETRAINING

Colonel Rolfe L. Hillman Jr.
U.S. Army Retired



On a summer day in 1937 at Fort Benning, Georgia, 14 soldiers of the 8th United States Infantry have detrained from a narrow gauge train and, Springfield rifles slung, are route-stepping away to the right. The tall soldier in center front carries a bugle slung at his side. Just ahead of him, a soldier of morose mien has a large rip in his riding breeches just above the top of his wrap leggings. Two men wear the double stripes of corporal and three the triple stripes of the buck sergeant. The dust from their steps and the pine woods in the background suggest that the group will soon be involved in a tactical field exercise. To their rear by 19 years is World War I; they are moving, more quickly than they know, through the next four years to World War II.

In this picture, an obscure moment in Army history is fixed and displayed. It asks to be put on the wall, to be studied in

detail. Eventually we are compelled to seek out and record the circumstances of this glimpse of the Army in those haphazard years. Army life was said to be one of genteel poverty, but the Army was also described by a British historian as "so much out of the public consciousness that it almost ceased to be an accepted part of American life."

I came along too late to serve in that Army, but now, at a remove of half a century, I have a great urge to go back to Fort Benning, detrain with the 8th Infantry, and stand where several lines of history intersect—the histories of Fort Benning, of a railroad, of an infantry regiment, and of the largely forgotten state-of-the-Army.

Fort Benning, its vast acreage sprawled in west central Georgia by the Chattahoochee River, has been aptly described as a rural trade school that is the spiritual home of the Army's

infantry branch. In September 1918, two months before the somewhat sudden end of World War I, planners in Washington ordered the opening of an Infantry School of Arms at a site near Columbus, Georgia, and construction began with wartime speed and bustle. With the Armistice coming on 11 November, the camp's existence became "iffy," on-again, off-again, with the officers already assigned using every stratagem to keep it in being. On 2 December, 100 members of the West Point Class of November 1918 arrived, and the school—with or without a clear license—was open for business.

In the 70 years since that time, Fort Benning has maintained the core mission of teaching officers to lead platoons, companies, battalions. Whatever its other missions, the Infantry School has been primarily concerned with teaching leaders to move troops to close with and destroy the enemy in ground combat.

After World War II, Winston Churchill marveled that the U.S. Army of 1939, "starved and despised for two decades," could have suddenly produced such a wealth of command talent. A significant part of that top command talent—Bradley, Collins, Ridgway, Decker, Stilwell—either had served on Benning's staff and faculty or had graduated from a class during the five years (from 1927 until 1932) in which, Lieutenant Colonel George C. Marshall, as Assistant Commandant, had molded the school. It is of equal significance that the Infantry School, using training philosophies and methods developed during those peacetime years, geared its Officer Candidate School to produce more than 60,000 second lieutenants of Infantry between July 1941 and VJ Day in September 1945.

In the photograph, the men of the 8th Infantry have detrained from a 60-centimeter-gauge railway (1 foot, 11 $\frac{1}{2}$ inches, compared to the standard gauge of 4 feet, 8 $\frac{1}{2}$ inches). That railway served as a post utility, carrying students to ranges and tactical training areas from 1919 until 1946. Over the years, the passengers dubbed it the A.E.F. Special, the Bullseye Limited, the Cinder Siesta, and the Chattahoochee Choo Choo. A proper official designation would have been the Fort Benning Light Railway, because "light railway" was the designation of this equipment as it had been used in France by the American Expeditionary Forces to be compatible with similar systems used by the British and the French to move supplies forward from standard-gauge railheads.

The U.S. production of such 2-6-2T locomotives eventually came to 305, with their associated rolling stock and rails, much of it left unshipped at the end of the war and after close-out production. Planners from the Office of the Chief of Engineers saw two reasons for using this surplus equipment at peacetime installations: The systems could be used for transportation, and for training troops to use light railway equipment on future battlefields. The new camp at Fort Benning was considered a good test case, and veterans of light railway engineering in France promptly put it, so to speak, on the track.

With two locomotives on hand, the first mile of track at Benning was laid in June 1919. By the end of 1920 there were 16 miles of track to ranges, tactical training areas, and lumber operations. Twelve locomotives were available by March

1922, and by the summer of 1923 the line was up to 27 miles, the highest known figure. At that time, it was reported that it carried 81,000 passengers a year, which figures out to about 300 per instructional day. (By comparison, in one month of wartime 1942, 42,000 students and troops were carried by an inventory of 18 locomotives and 34 passenger cars.)

By 1937, the Dinky Line (another of its nicknames) was supplemented by buses and trucks, and it was more sentiment and tradition than effectiveness that kept it running into the busy World War II years. It was officially closed in November 1946. One locomotive saved from a 1948 War Assets Administration sale remains on display in front of the National Infantry Museum on the main post at Fort Benning.

William A. Ganoe, a devoted and forthrightly partisan Army historian, wrote (in 1943) that the years 1930 and 1931 had been a military slough of despond at its lowest and gloomiest level. "These post-Depression years," he said, "were as discouraging to outward-looking military men as any in our history. The public was as much interested in the army as in polar bears."

Affairs began to improve when Douglas MacArthur became Chief of Staff in November 1930; in Ganoe's words, "It was almost as if the hand of Providence had plucked him by the shoulder....Never did the service so need a champion of his caliber."

ARMY INCREASED STRENGTH

On 2 October 1935, Malin Craig succeeded MacArthur and served until he was replaced by George C. Marshall on 1 September 1939, which happened to be the day Hitler invaded Poland.

From this distance in time, Craig may seem like a valley of historical interest between two towering peaks, but those who have studied this period give him high marks. In the year of his arrival, Congress authorized the Regular Army to increase its enlisted strength to a long-sought goal of 165,000. (That many men would not fill a second seating at the University of Michigan stadium.)

Under Craig's direction, manpower planning went forward with the Protective Mobilization Plan of 1937, and in the same period there evolved, for the first time before actual hostilities, a definite training plan that included the location, size, and scheduling of replacement training centers, unit training centers, and schools. Russell F. Weigley, in a recent (1984) publication, credits Malin Craig with hardheaded realism and determination and says he was "a success because he was uncommonly foresighted and capable... little remembered now, it is questionable whether any soldier did more than he to make possible American military accomplishments in World War II."

Just as Fort Benning sprang from World War I, and just as the narrow gauge railroad was left over from that war, the 8th United States Infantry, in its long history, also had a connection to the Great War of the then not-so-distant past. In the lower left section of the regiment's distinctive insignia,

for example, there is what seems to be a common chicken foot. The heraldic terminology is "in dexter base an eagle's claw erased proper," representing "the maimed strength of the Prussian eagle, the regiment's part in the Occupation of Germany after World War I."

Most of us are surprised to discover that U.S. occupation forces were stationed in Germany as late as 1923, but the 8th Infantry was there. The regiment had arrived in France in September 1918, too late for commitment to combat. While masses of troops were shipping back to Hoboken in the summer of 1919, the 8th Infantry found itself instead—very probably to the consternation of its members—designated to join American Forces in Germany, occupying a Rhineland bridgehead centered on Coblenz. Amid bitter international bickering over the proper treatment of a defeated Germany, they furnished a low-key U.S. presence until the morning of 24 January 1923, when the huge American flag flying above the Rhine from Fortress Ehrenbreitstein was pulled down and the last contingent marched down to the *bahnhof*.

From Antwerp, they sailed home in the transport *St. Mihiel*, described as their "Noah's Ark," taking with them wives, babies, horses, police dogs, monkeys, fish, and furniture. The regiment went directly to Savannah, Georgia, and from that time until the onset of World War II, was split between Fort Screven, near Savannah, and Fort Moultrie, South Carolina, near Charleston.

This dispersion of battalions was the norm. In the mid-1930s, the infantry's 24 regiments in the United States were spread among 45 Army posts, with 24 of those posts having a battalion or less—a situation that, as someone observed, was remarkably reminiscent of the days of the Indian wars. The Army's efforts to close out these posts were stubbornly opposed by local interests, who made their concerns clearly known to their elected representatives. It would be decades before an effective method of establishing an installation "hit list" was concocted.

In the spring of 1932, finishing his duties at Fort Benning, Lieutenant Colonel George Marshall was pleased to draw a command assignment. He would go to Fort Screven to command a battalion of the 8th Infantry. In 1933 he found most of his duty time devoted to administering the Civilian Conservation Corps (CCC) in his area. (The requirements were steep—on 1 May, Franklin Roosevelt told the War Department to produce a plan that would move 250,000 CCC trainees to camp by 1 July.) On 29 June, Marshall, now selected for promotion to colonel, assumed command of the entire 8th Infantry, headquartered at Fort Moultrie. (He was in his command duty only a few months before being ordered to Chicago as senior instructor with the Illinois National Guard.)

The battalions of the 8th Infantry made an annual jaunt to use the superior training areas and facilities of Fort Benning, and one of those trips accounts for this photograph. A veteran soldier who made the 1936 trip from Fort Moultrie as a "john private," writing years later, described highlights of "maneuvers" against the 24th Infantry "school troops" and added, "I recall how welcome that narrow gauge train looked

after we had been out in those woods several days, dirty, tired, having hardly slept.... That was the old Army. I am glad that I was part of it."

The 8th Infantry gained its first battle streamers in the Mexican War and its most recent in Vietnam. On a summer day in 1937, though, that long line of history put some of its men in a training area at Fort Benning.

The tall soldier in the middle of the picture carries a bugle at his hip, an instrument that had been used for centuries as a tool of command, control, and communication. Although there has not been "a company bugler" since the early days of World War II, the lore of the bugle is etched deeply in our past.

Elizabeth B. Custer opens the preface to *Following the*



Guidon (1890) with "Before beginning the story of our summer's camp on Big Creek, Kansas, I should like to make our bugle a more familiar friend to those who know it only by hearsay." She then presents nine pages of well researched and lively history (back to the Crusade of 1248) of the military use of the bugle and a detailed account of the calls used in her day—"the hourly monitor" and "the scourge of ease."

Mrs. Custer carries out her theme by heading each of her 22 chapters with the notes to bugle calls; those accompanied by soldier-invented words hold a special retrospective interest: Sick Call, "Go get your pills"; Fire Call was "Fire, fire, get your buckets," and then two others that have disappeared into the past:

Stable Call:

Come to the stable, all ye who are able
And give your horse some oats and some corn
For if you don't do it your colonel will know it
And you will rue it as sure as you're born.

Rogue's March:

Poor old soldier, poor old soldier
He'll be tarred and feathered and sent to hell,
Because he did not soldier well.

Would the bugler in our picture have known, for example, that in 1900 during China's Boxer Rebellion a young bugler with the 14th Infantry, Calvin P. Titus, scaled the wall leading to the Imperial City in Peking (with a determined "I'll try, sir!") for which deed he earned a Medal of Honor? Would he have known that Titus went on to commissioned service and was chief of staff of the brigade organization based on the 8th Infantry in the Rhineland Occupation?

We can learn something of 1937 uniforms and equipment from a top-to-bottom look at one of the soldiers in the photograph, the fifth man from the left—the one with corporal's stripes and unbuttoned sleeve:

- On his campaign hat, the regiment's distinctive insignia shows squarely. (A magnifying glass helped identify the group as being members of the 8th Infantry.) The campaign hat, of course, is the forerunner of the headgear that distinguishes today's drill sergeant. An issue of the hat in 1912 was called the Montana Peak because of its high crown; a version with a lower crown became general issue in 1921 and was worn until 1940.

- At some point in the evolution of uniforms, riding breeches became the duty attire of soldiers who did not ride horses. A photograph of elements of the 6th Infantry on parade at Jefferson Barracks, Missouri, in the mid-1930s shows that, at least in some infantry units, the campaign hat, OD shirt, breeches, and wrap leggings were habitually worn, whether in the field or on parade. At the top end of the rank scale, when Douglas MacArthur was sworn in as Chief of Staff in 1930, both he and the Judge Advocate General wore blouses, Sam Browne belts, riding breeches, and boots with spurs. (Conventional wisdom in the Old Army held that spurs were invented to keep a cavalryman's feet from slipping off his desk.) Breeches went out of use with the final reluctant demise of the horse cavalry in 1943.

- In the meaning of "a covering (as of leather or cloth)

for the leg," the legging (or leggin) is dated by Webster's Dictionary to 1751. "Puttee" derives from the Hindi *patti*, strip of cloth (1886). Canvas leggings that laced up the side were worn both before and after World War I, but in wartime it was easier to mass-produce the wrap material. These leggings were followed by a combat boot that was devised from a work shoe topped with a wide strap that buckled at the side, then on to the many adaptations of the prized paratrooper jump boot. Puttees made their way into a passage of the grim and graphic writing that characterizes many accounts of World War I: "The ration parties lumbered up Gob Gully past broken trees from which dangled horrible wet legs trailing undone puttees to the ground."

- The infantryman calls his lapel insignia "crossed rifles" (churlish persons of other branches have sometimes called them "idiot sticks"), but the correct terminology is "crossed muskets." The official insignia adopted in 1922 is based on the 1795 model Springfield Arsenal musket, the first official U.S. shoulder weapon made in a government arsenal. In 1937,



the pictured troops are still carrying the modified Springfield 1903 rifle, despite the fact that John C. Garand's "Rifle, semi-automatic, cal. 30, M1" had been adopted in January 1936. The first M1s came off the line in September 1937, but efforts to get them out in quantity were slowed by a plague of minor production problems, criticism of its capabilities, and late-coming competition from a rival semiautomatic, the Johnson. The whole matter got Congressional attention, and by November 1940, *Life* magazine termed it "one of the greatest military squabbles in U.S. history." By the middle of 1941, six months short of Pearl Harbor, only about 1,100 Garand M1s were being produced daily. (On 15 July 1942 I was entrusted with a Garand M1, exhorted to give it good care, and directed to memorize the rifle's serial number. It was 696282.)

In the mid-1930s the Army had a legitimate gripe concerning pay—privates were getting paid less than the men in the Civilian Conservation Corps. William Ganoe wrote, with his usual indignation, of the "superhuman social task for the country" in which "the \$21-a-month trained soldier was making possible the encampments of the \$30-a-month indigents."

At \$21 paid once a month, every dime counted, and competition for specialist ratings was high. In James Jones' classic *From Here to Eternity*, a buddy says to the restless bugler Prewitt, "You got a Pfc. and a Fourth Class Specialist... You got a good life." If that terminology is mysterious to latecomers, a veteran of those years explains it this way:

The rank of Private First Class also included six different levels (#1-6) of class specialists. The basic PFC monthly pay was \$30 with additional pay for each class specialist. The lowest class specialist was #6, which would have been an additional \$3 per month. In our situation at Plattsburg Barracks, for example, the 6th Class was the Browning Automatic Rifleman level, the 5th Class was the Second Cook, and the 4th Class was the First Cook. A "First and First" or PFC First Class Specialist earned a total of \$60.

In 1986, Charles Willeford's book, *Something About a Soldier*, earned a review calling it "a marvelous guide to the masculine ghetto that was our old peacetime Army." Willeford, Depression-driven in 1935, lied about being 16 years of age and went to the Philippines in the Army Air

Corps. Having worked his way up to the position of ammunition truck driver, he approached the end of three years of service and thought surely he would make Private First Class, the grade prescribed by the Table of Organization. Instead, when he was relieved from duty to prepare for homeward shipment, he says:

...a recruit named Daniels, with only six months service, was assigned to the gas truck in my place. He was promoted to P.F.C. the same day... I had been cheated out of my deserved promotion. A P.F.C. made thirty bucks a month, and that extra nine bucks would have made a world of difference to me.

But he made it up later. Stateside, he reenlisted for the 11th Cavalry at the Presidio of Monterey, California, and after a year the troop first sergeant surprised him with a marvelous career opportunity:

Do you mean, I said, still not quite believing it, that if I take a job as second horseshoer, I'll get P.F.C. and fourth class specialist, too? First and fourth?

Willeford ends his account with a wry and eloquently ironic comment on the nature of service in those years:

It just went to prove that all a man had to do in the Army was to live right, work hard, and all the good things would eventually come his way. It had certainly worked out that way for me.

The camera having done its task on that summer day in 1937, these 14 soldiers of the 8th Infantry would continue to march—away from Fort Benning, out of the 8th Infantry and, in their own individual lines of history, into the central experience of their generation, World War II.

We hope they came through in good fashion and that, along with Private First Class Willeford, they lived right, worked hard, and all good things eventually came their way.

Colonel Rolfe L. Hillman, Jr., commissioned Infantry from the United States Military Academy in 1945, served in Japan, Korea, Austria, and Vietnam. On his second assignment to the faculty of the Infantry School, 1959-1962, he began his research on Fort Benning's rail operation. Now retired and living in Arlington, Virginia, he has written extensively for service journals, including several previous articles for INFANTRY.



TRAINING NOTES



Dragon Training

MAJOR DEE C. CHRISTENSEN

Since the Dragon antiautomor weapon is likely to remain in the Army's inventory for approximately the next decade, unit commanders must train their soldiers to use it as effectively as possible. The problem is that the system requires a considerable amount of training to sustain minimum levels of proficiency.

The most important aspects of Dragon training are understanding the system's design characteristics and inherent weaknesses, and then incorporating battlefield conditions into all phases of training to try to offset those weaknesses.

One such weakness is the Dragon's probability of hit (PH), which conservative estimates place at about 20 percent. What is most surprising about this figure is that most of the PH data generated by units and kept by the Missile Command (MICOM) is based on live fires conducted in a sterile environment that seems to be molded to insure a high percentage of target hits. Gunners are therefore given a false impression of the performance characteristics of the weapon. Its true PH remains unknown.

Furthermore, discussions with subject matter experts indicate that 75 percent of all misses can be attributed to the missile's characteristics during launch and to gunner error during the last two or three seconds of tracking.

There appears to be little that can be done about the performance characteris-

tics of the weapon. Because of its design, anything that causes the gunner to flinch will affect the flight of the missile. In most instances, flinching is an involuntary muscle reflex that cannot be trained away. This phenomenon of gunner error can be explained in terms of breath control at maximum range—a gunner must hold his breath for approximately 11 seconds. If a gunner takes a breath during that time, his shoulder tends to rise and drop, which affects the missile's flight. Compounding the problem is the large signature of the weapon, its slow time of flight, and the enemy's response when he recognizes an incoming missile.

LIMIT EFFECTS

Although we cannot totally overcome the weapon's characteristics, we can limit their effects by trying to duplicate a wartime environment during all phases of Dragon training. The effect of this effort will be two-fold: First, gunners will better understand why the system cannot be used against certain targets, and the environment will better condition them to deal with the probability of missing their targets.

Second, if trainers recognize the weapon's characteristics, they can try to ensure that the tactical employment of the weapon is based on the system's weak-

nesses. Commanders must understand that a Dragon gunner's skill and knowledge is far more important than a high percentage of live fire hits. Even in the best case, a high percentage of hits during training is meaningless if those hits are not obtained under realistic combat conditions.

When using Dragon training devices and also when conducting live fire exercises, units should set up their ranges so that the Dragon gunners are placed under stress; for example, MILES (multiple integrated laser engagement system) devices can be used to simulate incoming direct fire from coaxial machineguns while battlefield obscuration can be simulated by using smoke. Artillery and hand grenade simulators should be thrown as close to a gunner as is safe to try to get him to flinch.

To increase his heart rate and therefore his breathing, a gunner should run up to the firing position. For live fire exercises, plywood mock-ups that can move in different directions at varying speeds can be created. Gunnery tables and live fire exercises should also be carried out under these conditions. Initially, the most likely result will be a decrease in gunner qualification scores and live fire hits. But this will be more than offset by more knowledgeable and proficient gunners. Commanders should understand this and not over-react to the statistics.

In addition to duplicating a combat environment, commanders and trainers must understand how to use the training devices currently in the field: the Launch Effects Trainer (LET), the Launch Environment Simulator (LES) and MILES devices. Unfortunately, no tests have proved that training with these devices will improve a gunner's chances of hitting a target. Nevertheless, the Dragon is dependent upon them, and each device must be used on the basis of its limited capability.

The LET and the LES must be used together. The LET gives a gunner a poor sense of blast and only a minor sense of recoil. The LES provides a more realistic sense of blast and recoil, but can be fired only five times during a given day because of safety considerations. Neither device gives a gunner the sense of weight loss associated with a missile leaving the

launch tube. Both are used in conjunction with the monitoring set and an infrared target source, which must move from flank to flank with little variation in speed.

MILES is suitable for force-on-force exercises, but it is not a gunnery trainer. MILES does not duplicate any of the Dragon's characteristics when it is fired.

All training with these devices should be conducted with both the day and the night trackers. Because of the night sight's weight and associated awkwardness, though, many units tend to use it only for night observation and security purposes. As a result, most gunners are not trained on thermal target identification, nor are they trained to cope with the weight of the sight. In this case, gunnery tables should be executed at least twice—once with the day tracker during hours of visibility and once with the night sight

during hours of darkness. Training programs should also include illumination using the day sight tracker.

Other problems associated with the training devices include unit reports of maintenance deficiencies. A review of one study conducted by the Army Training Board pointed out that most maintenance headaches result from improper operator maintenance. In most units, nobody is placed in charge of the equipment when it is not in use. Consequently, the equipment sits idle in unit arms rooms.

To correct this problem, units should sub-hand-receipt training devices to the NCOs in charge of Dragon training and hold them responsible for the appropriate periodic maintenance services and for all operator maintenance checks.

Because of the limited number of training devices available, most units consolidate their Dragon training. Regardless of the level of consolidation, however, first line supervisors should conduct the training. We simply cannot afford to have unit experts, mobile training teams, or civilian contractors conduct the instruction on a common weapon system.

Army and Marine Corps training institutions achieve about the same results as any of these groups. In fact, with the information on the Dragon in Army field manuals and training publications, units themselves can run a comparable program. All the unit trainers have to do is read the references and continually emphasize and execute gunner training.

Nobody knows how often sustainment training has to be conducted to maintain proficiency, but the skill retention curve does drop sharply after extensive training periods. This indicates that training must be conducted continually, not simply for one or two weeks before a live fire exercise.

Finally, the Army must recognize that, even with the improved warhead on the Dragon II, the weapon has only limited killing capability against tanks equipped with reactive armor. Even if its armor penetration could be improved further, the targets would still have to be hit before they could be killed.

Gunners must be trained, therefore, to



determine which vehicles can be killed and which cannot. Moreover, commanders must understand that the Dragon is a system of last resort against concentrated armor formations, and that it should be used more against lightly armored vehicles and stationary non-armored targets such as bunkers and fortifications.

Until the AAWS-M (antiarmor weapon system-medium) is fielded, light infantry units that are deployed in areas with a high armored threat should be reinforced with a more effective tank killing capability. But so long as the Army equips units with the Dragon, the commanders and their soldiers must understand its limitations and train to overcome

them. To do otherwise is to invite destruction.

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The Infantry Spectrum Crossing from Light to Mech

CAPTAIN THOMAS E. FISH

When I was a lieutenant leading a light infantry platoon, "mech" was a four-letter word, one that I fervently hoped would never be applied to me. I had some pretty fixed ideas about the mechanized infantry, none of them flattering.

Young lieutenants, and other officers, can be very ethno-centric about their own little slice of the infantry spectrum. But those who get to stay on one side or the other of this spectrum are few and far between. Eventually, the great majority of us must cross over.

When I learned I was being assigned to the 3d Armored Division in Germany, I wrote a hasty letter to my former brigade commander who had been a mechanized battalion commander. His first bit of advice was, "Learn the equipment; try to swing a job as the battalion motor officer (BMO) before they give you a company." As it turned out, though, my first job in my new battalion was to command a rifle company, and "on-the-job training" suddenly took on a whole new meaning.

What follows is a distillation of the colonel's advice, that of my current battalion commander, and a few of my own observations. If you are a light leader bound for mech country and company com-

mand, this may serve as a useful guide.

The link between light and mech, and the key to making a successful transition from light platoon leader to mechanized company commander, is our AirLand Battle doctrine. The tenets of this doctrine and the fundamentals explained in Field Manual 100-5 provide the guideposts. An officer, if he has a thorough understanding of this doctrine, can see how light and heavy forces fit together as pieces of a whole. And there is no mistaking the common threads that bind them. The "imperatives of modern combat," for example, are the same for all levels of command in the Army. Once you understand the principles under which the Army as a whole will fight, you can move more easily from one part of it to another.

TECHNIQUES VARY

While light and heavy forces are bound together under AirLand Battle doctrine and the basic infantry tasks, the techniques that leaders in these units use to apply combat power to accomplish their missions vary widely.

In positioning weapons, for example, a light platoon leader emplaces his M60

machineguns to cover the most likely dismounted avenues of approach and positions his Dragons to cover the mounted avenue of approach, if there is one. He then assigns sectors to each of his three squads that provide mutual support and protect his key weapons. Within the platoon, the fighting positions are seldom more than 30 meters apart. The mission is usually to retain a piece of ground or to destroy enemy forces in a narrow sector.

A Bradley company commander is usually given much more space than his light counterpart. He has 13 BFVs to position, and each vehicle requires at least two fighting positions 50 meters apart. He uses his dismount troops—armed with squad automatic weapons, M203 grenade launchers, Dragons, and AT-4 antiarmor weapons—to provide flank and rear security, to observe the battlefield while the Bradleys take up hide positions, and to cover the dismounted avenues of approach. Often a mechanized platoon's dismounted elements are lumped together instead of being employed as squads, and a platoon leader must then divide his attention between his mounted and dismounted elements.

Both light and heavy forces must also

have security to survive, but their techniques for achieving it are decidedly different:

A light fighter depends almost entirely on stealth. In the defense he uses mostly passive means such as camouflage and noise and light discipline to protect himself from enemy observation. He does much the same during offensive operations, using the same skills as a deer hunter to flow across the terrain.

A mechanized warrior, because his machines make distinct signatures, must develop other means of security. He relies a great deal on deception, both in the offense and in the defense, and also on speed.

In the defense, his vehicles can remain undiscovered in hide positions, then quickly move forward to fighting positions, fire, and move again. In the attack, he can do his damage and be gone before the enemy can react.

His survival also depends on skilled dismounted soldiers conducting patrols out front to destroy enemy reconnaissance forces, clear danger areas, and use their rifles and bayonets to destroy the enemy's dismounted infantry.

Leaders in both kinds of units can use various tactical techniques in employing their assets in accordance with AirLand Battle doctrine. If an officer succeeds as a light infantry platoon leader, it is because he has learned to accomplish a lot with limited materiel assets. That same resourcefulness and imagination, when applied to the business of using Bradleys and Abrams tanks to destroy Soviet BMPs (armored personnel carriers) and T-80 tanks, for example, will also help him succeed as a mechanized infantry company commander.

When I first arrived, the most striking difference I noticed between my new mechanized environment and my former light one, besides being in a foreign country, was the multitude of great metal monsters parked across the street from my new battalion. I fully understood, then, why I had been advised to try to get a job as battalion motor officer before commanding a company.

Preparing for and conducting a change of command inventory helped; at least I learned how much "stuff" I had and

what it was called.

Then it was time for me to get into the motor pool and ask lots of stupid questions. I was honest with my soldiers. I told them I had just come from another world and I was going to get in their way until I was satisfied that I understood *their* world. They didn't mind my poking around the motor pool or constantly asking questions. In fact, I think they would have been worried if I had acted otherwise.

So, in going from light to mechanized infantry, rule number one is "get greasy and ask questions." It doesn't take too long to learn, and it feels good once you do. Even if you don't walk into a company command position or start off as a battalion motor officer, you can become familiar with your battalion's modified table of organization and equipment and visit different companies during command motor stables to get a better feel for the battalion's equipment and maintenance procedures.

FASTER

Aside from the "metal monsters," the next most immediate difference was in the field, where things in the mechanized world move much faster, especially with the Bradley. This speed forces a former light fighter to make two important adjustments.

The first adjustment is to learn to navigate faster than a 3.5-mile-per-hour walking pace, or you will get lost zooming around at 35 miles per hour in a "track." As my new battalion commander pointed out, this is not too difficult if you practice on your own in your jeep or HMMWV (high mobility multipurpose wheeled vehicle) and think big.

Navigating from a vehicle is similar to navigating from a helicopter (something all light infantry platoon leaders learn to do), except that you don't have as good a view. You concentrate on large terrain features, and you think in terms of kilometers instead of meters. Seldom will you do an entire exercise using the same map sheet. (My battalion commander still

laughs about my first encounter with "the giant map.")

The second adjustment is to speed up your thinking. This process is necessary not only to keep up with the speed of your vehicles but also to keep up with the pace of events. The tactical situations are more fluid, and units have larger areas of responsibility. More things can happen in one minute than used to happen to your light unit in an hour.

Mostly, it just takes time to get acclimated. But there are some things that can help you condense your decision cycle. Think about probable situations and possible courses of action before you get into an active environment. Have frequent tactical discussions with the leaders around you. Develop good SOPs and stick to basic battle drills that can be adapted to many situations. When in the field, concentrate on controlling the battle, and rely heavily on your first sergeant and company XO to coordinate the rest of the show. Don't clutter your mind with peripheral events, so long as your two chief assistants can handle them.

This brings us to another fundamental difference between your days as a light platoon leader and your current position. A platoon leader or company commander in a light unit can be, and is expected to be, largely self-sufficient. He can load his troops up with MREs (meals, ready to eat), water, and ammunition, and operate on his own for several days, so long as he can find some natural sources of water. During sustained low intensity operations, an occasional helicopter resupply can keep him going.

As my battalion S-4 pointed out to me recently, though, the amount and types of equipment that require maintenance, together with high rates of fuel and ammunition consumption, tie the mechanized company commander to his battalion trains. This means that he must make more of an effort to incorporate logistics into his planning and force this system to work for him. Otherwise, his company won't be able to fight.

Additionally, a mechanized team can run into Murphy's Law in a big way. One thrown track or stuck vehicle can not only take a whole squad out of the action, but can also require the diversion of a large

amount of combat power at a critical time. Again, we see the importance of a strong XO and first sergeant, who are responsible for making sure the company is sustained without hindering its unity of effort.

While a mechanized company's numerous vehicles and weapons give its commander many opportunities, they also expose him to the ever-present danger of becoming overwhelmed or tied down by these machines. Soldiers are still the most important resource, and infantry soldiers need hard training.

As a mechanized infantry commander, you must constantly balance the requirements for mounted and dismounted training. Although the small unit tactical focus in mechanized units is on platoons rather than squads, the role of noncommissioned officers here is no less important than it is in light units. In fact, the Bradley adds even more individual and team tasks that sergeants must teach their

soldiers, and requires the commander to manage a multi-dimensional training program. And don't forget—there is just as much of a requirement for good physical conditioning in heavy as in light units.

At first glance, it may appear that the different ends of the infantry spectrum are too far apart, too alien, for an officer to make a successful transition from one end to the other. But they have more important things in common than they have differences: Infantry soldiers are still infantry soldiers, and sound leadership is still sound leadership. Common sense is still at a premium, and NCOs are still the backbone of the company. There are still plenty of foot marches; marksmanship will always be the pre-eminent individual skill of the infantryman; and dismounted infiltration onto key terrain can still be a devastating "ace in the hole."

It is not difficult to cross from light to "mech" if you realize that the warrior spirit is the same in both kinds of units

and if you put forth just a little extra effort.

Meanwhile, for those of you in the Officer Advanced Course, use your time wisely. While the course can be a little slow at times, the small-group tactical instruction gives you an opportunity to absorb a lot of information about mechanized and combined arms operations at company, battalion, and brigade levels.

The biggest obstacle in your way will be the old "light" prejudice that "mech" is a four-letter word. It is better to remember that smart infantry is the best infantry, whether it walks or rolls.

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Lessons on the BIFV

LIEUTENANT JEROME J. BURNS

During a battalion ARTEP at the Hohenfels Training Area in Germany, I had my first real experience as a second lieutenant in the tactical employment of the Bradley infantry fighting vehicle (BIFV). Up to that time, my only experience with it had been what I had learned in the Bradley Commander's Course at Fort Benning and on one training exercise. From the training at Hohenfels, I discovered that, although the BIFV has an incredible amount of firepower and mobility, it is neither indestructible nor all-destroying.

This discovery grew out of some specific lessons that helped me survive longer and accomplish the mission better. Although there is nothing new about

these lessons, they do offer, through one lieutenant's actual experience, a more realistic understanding of the basics of Bradley employment that may be helpful to others who are just coming into Bradley units.

The training at Hohenfels was conducted in three phases—train-up, ARTEPs, and opposing force (OPFOR). During each phase, the units executed four main tactical scenarios—a hasty attack, a deliberate defense, a deliberate night attack, and a hasty defense. The lessons I learned are presented within these four scenarios.

Hasty Attack:

- Never engage a tank while it is scanning in your direction. It will find and

destroy your BIFV long before your BIFV can acquire and engage it with a TOW. A BIFV can destroy a tank only if the tank is preoccupied or looking in another direction, or if the vehicle's dismounted troops get a sneak shot with their Dragons.

- Never skyline a BIFV. Even if the enemy can't engage the vehicle with direct fire, he will determine its location and target it with indirect fire. Therefore, to locate targets from a reverse slope position, you must dismount and observe or send out an observation post team to call back the target information. Once you acquire the targets, move up and engage them, and promptly return to the reverse slope. After your BIFV makes

its first engagement, though, assume that the enemy has located your original position and move to an alternate position in the general vicinity.

- When assaulting mounted from one battle position to another use covered and concealed routes whenever possible; move as rapidly as possible across open areas; and thoroughly scan the next position and the likely enemy locations before moving, even if the position has been secured earlier. The enemy may have reoccupied the position after it was cleared by the scouts or a dismount team.

- In the attack, always move when under direct or indirect fire. Failure to move slows or stalls the momentum of your attack, which gives the enemy time to regroup or react. In addition, it allows the enemy to fix your position and either call indirect fire onto it or maneuver to a position from which he can engage you by direct fire.

- Mobility is vital to the survival of the BIFV. Limited avenues of mobility allow the enemy to predict the locations and actions of the BIFV more accurately and therefore to outmaneuver it or call in indirect fire on it. Some limiting terrain features and obstacles to watch out for are steep ridges, ditches, cliffs, rivers, and thick tree lines. It is important, when planning and executing operations, to develop courses of action that you can take in such situations.

- When you receive direct fire in the attack it is imperative that you react quickly and instinctively, because any delay will certainly prove fatal. Get out of the engagement area, return fire, lay smoke, and seek cover and concealment. Turn the smoke on as soon as the vehicle receives fire.

Deliberate Defense:

- Make sure the BIFV has good cover and concealment. First, if it can't be seen it can't be engaged accurately, if at all. Second, if it is seen it will be protected from both direct and indirect fires. Make sure that the positions are dug deep, and that the dismount element has good overhead cover. There is no room for excuses; it must be done.

- It is not necessary (or even a good idea) to occupy fighting positions until the enemy has entered the engagement

area. Meanwhile, get the BIFV into a good hide position nearby to prevent the enemy from easily locating it or its fighting position.

- Provide alternate and supplementary positions for the BIFV. A stationary BIFV will be targeted immediately, but one that shoots and moves will confuse the enemy about its location and intentions.

- Emplace NBC equipment, including the M-8 alarm and M-9 paper detectors. These will provide the only warning the infantryman has of chemical agents in his sector, aside from observing a fellow soldier who is showing symptoms of exposure.

- See that you have rear and flank security when in any form of battle position or deliberate defensive position. A



BIFV is extremely vulnerable to dismounted infantry in wooded areas, because the crewmen inside cannot hear when the engine is running or they are wearing their helmets. Dismounted soldiers in a listening or observation post can hear approaching infantry and warn the mounted crewmen.

Deliberate Night Attack:

When moving across an open field, move as quickly as possible and in some kind of attack formation with plenty of dispersion. If you can't take up a good attack formation, then allow the lead vehicle to move out far enough in front to attract enemy fire while the rear vehicles maneuver to provide support.

- As soon as your platoon encounters enemy fire, the soldiers must act on instinct with the rear elements breaking right or left to provide supporting fires and to flank the enemy.

- When a BIFV enters a restrictive

area, the troops must dismount to clear the area while the vehicles provide close-in support. Although a dismount team can be sent out early to clear an area before the mounted attack begins, this is not always a good idea. The enemy can infiltrate back in once the dismount element has cleared, which will leave the dismounted soldiers without any close-in heavy fire support. If the dismount soldiers stay in the vehicle and then dismount to clear a restrictive area, they will have close-in support and can direct their efforts in one area.

Hasty Defense:

- Use obstacles to channel and stop an enemy attack. The emplacement of obstacles must be under the supervision of a knowledgeable person, and while the obstacle is being implaced, someone must provide overwatching fire. Too, the obstacles must be covered with indirect fire and watched.

- Use the dismount element as an LP/OP and an antiarmor strong point. If it is far enough out in front of the mounted teams, it will deprive the enemy of accurate intelligence and force him to deploy early. The dismount element must have a safe way of returning.

The BIFV is an extremely powerful vehicle that is capable of doing a lot of damage to an enemy force, but only if the commander and the crewmen thoroughly understand its vulnerabilities. It is most effective when used in well covered and concealed positions and when working in close coordination with the dismount element.

The vehicle is not good as a main assault vehicle; it must move cautiously and stealthily, hugging woodlines and sneaking up behind targets. It is extremely vulnerable to tanks and should attack only with the utmost caution, agility, and concentration of force.

The BIFV is the infantryman's weapon of the future, and every lesson learned about its capabilities brings the infantry closer to accomplishing its mission.

Lieutenant Jerome J. Burns is assigned to the 1st Battalion, 30th Infantry, 3d Infantry Division, where he has led a BIFV platoon. He is a 1987 ROTC graduate of Texas A & M University.

ITEP Made Simple

CAPTAIN JON F. IRELAN

The Individual Training Evaluation Program (ITEP), implemented in 1983, is made up of three parts: the Commander's Evaluation, the Common Task Test (CTT), and the Skill Qualification Test (SQT).

Much has been said concerning the ITEP, and major commands may assume it is universally understood, but some commanders may need additional guidance on how to go about implementing it. In case you are one of these commanders, I would like to offer you some straight talk that will enable you to implement ITEP successfully, without being burdened with administrative tasks, and to link the ITEP with your unit's Mission Essential Tasks Lists (METLs).

I have to assume here that you plan your training day primarily around training your soldiers for your METL missions; that is, faced with the choice of having them spend a training day playing volleyball or having them conduct a reconnaissance patrol, you would choose the latter.

I further assume that you know you can find individual and leader tasks either in the Soldier's Manual of Common Tasks or in Soldier Training Publications (STPs), depending upon the skill level of the tasks involved. If you have read Field Manual 25-100, and if both of my previous assumptions are valid, then the ITEP is not so difficult to deal with.

The Commander's Evaluation is the most important portion of the ITEP, but the title is misleading. Think of it instead as a green-tab evaluation, and don't worry about what form to use to record it on. Any time soldiers take part in a collective task or a battle drill, both in-

dividual and leader tasks are performed, and an evaluation is made (hopefully, an objective one). A soldier receives his performance feedback during the after action review or maybe during footlocker or monthly performance counseling. The point here is that an evaluation is made, and this is a Commander's Evaluation in action.

You can evaluate your soldiers on *anything*, but specifically you should



concentrate on the things that promotion recommendations are based upon. The Commander's Evaluation is one warfighter's evaluation of another warfighter in action—a formal title for the informal teaching, counseling, and mentoring a commander does constantly.

The Common Task Test is a locally administered, locally scored hands-on test of 18 tasks from the Soldier's Manual of Common Tasks. NCOs administer the training, the test, and if necessary, the retest. You need not stop with the 18 tasks identified on the CTT notice. Although most of your unit's mission essential individual and leader tasks are

taken from the common task manual, you are encouraged to train and evaluate your particular warfighting tasks as well. And you record your results on the Commander's Evaluation.

The most controversial portion of the ITEP is the Skill Qualification Test. When you look at the SQT notice you will quickly see that many of the testable tasks have no relationship to your unit's METL. But take heart. If the particular individual or leader tasks on your METL are not from the Soldier's Manual of Common Tasks, they are from the STPs (depending upon the skill level of the task). If you are training toward your METL, you are probably already doing a decent job of preparing your soldiers for the SQT, but it is vital that they are also trained to the tasks, conditions, and standards of the appropriate STP.

What about the other SQT notice tasks that are not included in your METL, such as "Operation of the Improved 81mm Mortar" for your 4.2-inch mortarmen? The answer is not a happy one: We study, we train, and we prepare our men for the test. We commanders just have to bite the bullet on this one. It may not be right, but we have to do the best we can to take care of our soldiers on this issue. Otherwise, we have not done our part in caring for their careers and promotions.

I hope that I have made ITEP a little easier for you to get a handle on while you go about your daily task of preparing your soldiers to fight and win.

Captain Jon F. Irelan is an infantry company commander in the Berlin Brigade.

French CP Operations

MAJOR CHARLES L. TOOMEY

It happens on every exercise. The TOC has to move, and it is always at night. The guys on the day shift have not had a good chance to rest since they deployed. By the end of a two-week FTX, they are so tired and sleepy that they are a danger to themselves, to the rest of the unit, and to anyone else they may meet on the road during a move.

The night shift gets a lot of practice breaking down, moving, and setting up in the dark. The day shift gets a lot of practice trying to maintain personal control while their sleep loss accumulates.

Many an S-3 or executive officer (XO) has asked, "How can we fix this? If it's like this on a two-week training exercise, what's it going to be like when we have to do it for months—and with somebody trying to find us and kill us?" The French Army may have some of the answers we have been looking for.

In March 1988 I was a member of a 3d Armored Division liaison team to a French corps headquarters during a multi-national command post exercise. Our participation with the French was limited to five days during which we were expected to man our liaison cell around the clock. The French corps chief of staff was politely insistent that we match our schedule to their shift operations. During this exercise I was introduced to a TOC shift procedure that I believe is far superior to any other I have been involved with.

The corps staff was divided into two cells. Each staff section had an equal manning of officers, sergeants, and junior enlisted soldiers in both cells.

Neither cell had a preponderance of the major decision makers, and not all of the principal staff officers were in the same cell. The corps chief of staff and the deputy chief of staff (a brigadier general and a colonel) served in different cells.

One interesting thing I noted was that some of the personnel on the staff, both officers and enlisted soldiers, were members of the French reserve force. I cannot remember their exact number or their duty positions, but it seemed they regularly participated in exercises with the headquarters.

THREE SHIFTS

Three shifts were scheduled in a 24-hour period: First shift, 0700-1400; second shift, 1400-2100; and third shift, 2100-0700. Over a 48-hour period, each cell would be on duty three times, once on each of these shifts. For example, the first cell would go on duty from 0700 until 1400 on Day 1, rest for seven hours, and go on the 10-hour night shift from 2100 until 0700 on Day 2. They would then rest for seven hours, go on the second shift from 1400-2100 of Day 2, and finally have an opportunity for a 10-hour rest period during the hours of darkness. Meals were served during a two-hour period at each shift change—from one hour before until one hour after.

Although each staff section was responsible for updating the members of the cell that was coming on duty, the entire relief cell was expected to be fully operational and ready to assume control

at the appointed hour. The replacement cell usually arrived to begin the transition about 30 minutes before the formal hand-over. I never saw any difficulties that could be charged to poor hand-over procedures. The French officers and sergeants formed a very professional group.

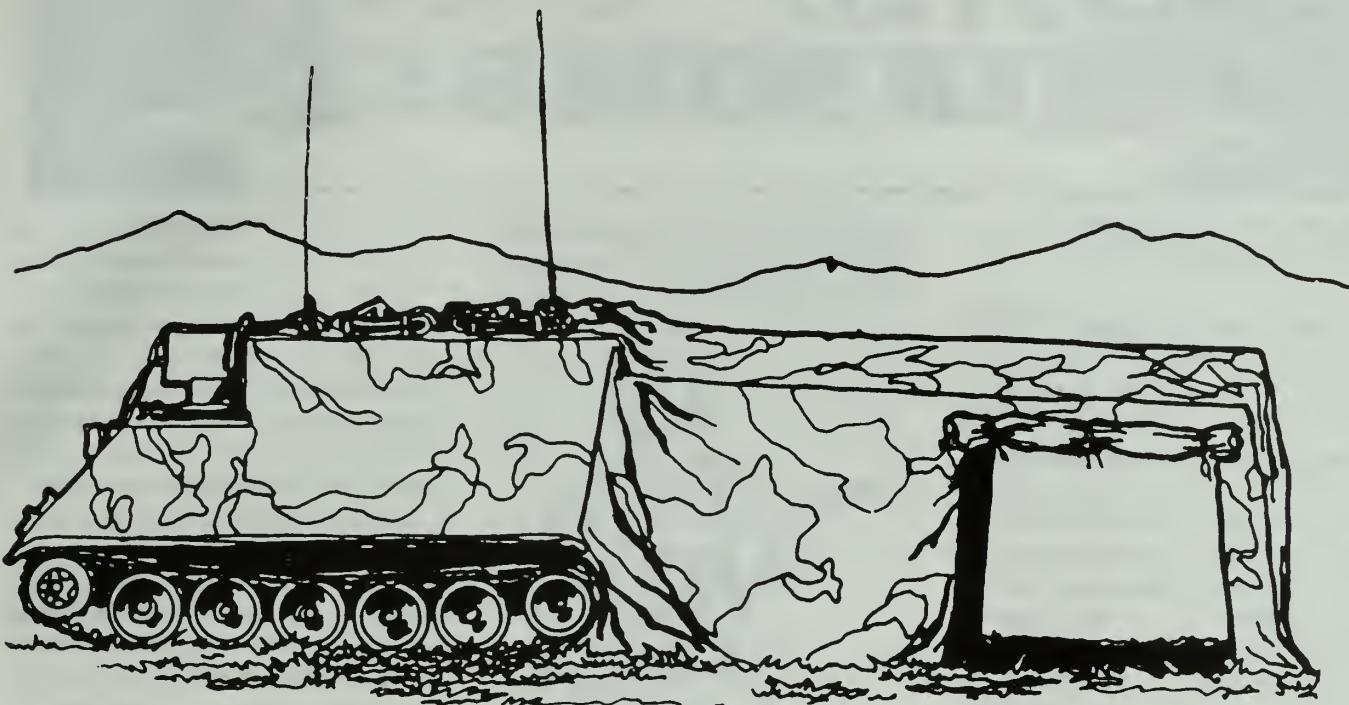
The only formal briefings took place daily, as I recall, at 1030. Either the deputy corps commander, the corps chief of staff, or the deputy chief of staff received the briefing and made the decisions for the day. If the situation dictated, there would also be a shorter briefing either late in the afternoon (about 1630) or in the evening (about 2000) to provide the guidance the staff needed to solve a particular problem. Only on two occasions do I recall that the corps commander was present at these briefings.

In retrospect, the formal briefing seemed to be held primarily to update the staff on the situation. We, of course, would update the senior G-3 officer before this briefing on the 3d Armored Division's current and future operations.

I must note that we remained in one location during the five days we were with the French. I cannot say with certainty they used echeloned command posts as we do, but if they had been required to move, I feel certain they could have done so easily while still maintaining control of the corps.

I observed some distinct advantages to the French way of running a command post.

- There were always decision makers in the CP.



- All members of the staff got an opportunity for at least eight hours of uninterrupted sleep in a 48-hour period, in addition to adequate time for personal hygiene.

- The shift procedures were highly disciplined and were respected by all staff members. Too, the soldiers' rest periods were carefully guarded.

In addition, this type of shift operation would support our own concept of continuous operations.

For us to adopt a similar system would require two actions. First, the people who resist change of any kind would have to be forced to try it. Second, our mess sections' possible objections to having such an un-American eating schedule would have to be dampened.

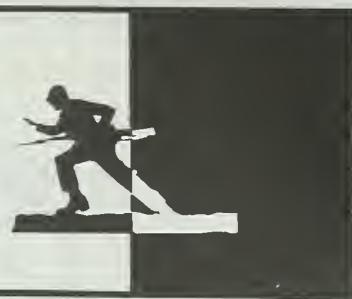
I am convinced that the French TOC schedule I worked with would be effective for a U.S. TOC group at brigade level or higher, perhaps even for the TOCs in some types of battalions. A division

level command post exercise would be a perfect time in which to test this concept. It is certainly worth trying.

Major Charles L. Toomey, an Engineer officer, was assigned to the G-3 Training section, 3d Armored Division, during this particular international command post exercise. He holds a master's degree from North Carolina State University and is now a student in the Advanced Military Studies Program at Fort Leavenworth.



ENLISTED CAREER NOTES



10th MOUNTAIN DIVISION VOLUNTEERS SOUGHT

Infantry Branch is looking for CMF 11 soldiers in the ranks of corporal through master sergeant/first sergeant to volunteer for assignment to the 10th Mountain Division (Light Infantry).

The 10th Mountain Division, one of the newest light infantry divisions in the active Army's total force structure, is an offense oriented, highly responsive division organized for a wide range of infantry-intensive missions worldwide.

The Division is also under the COHORT unit manning system, which means that all six of its infantry battalions are under the COHORT distribution plan. This gives stability to the soldiers assigned to it, because a normal COHORT cycle is three years.

The Division is located at Fort Drum, New York, one of the most beautiful areas of the country, where winter and summer sports opportunities abound and wildlife is plentiful.

The Division has new headquarters buildings, troop barracks, and dining facilities. New maintenance facilities are being built to support the post and the Division.

In addition, new housing is being built on post as well as new Government-leased housing off post. Fort Drum also has new post exchange and commissary facilities, along with a new child care development center.

CMF 11 soldiers who would like to be considered for assignment to the 10th Mountain Division may submit DA Form 4187 through their personnel service

centers or call their career advisors at AUTOVON 221-8055/8056, commercial (202) 325-8055/8056.

college and enroll in ROTC. Now, a soldier who has completed two years of active service can become eligible for an early release under the provisions of AR 635-200, Chapter 16-2.

All other qualification requirements remain in effect. These include the satisfactory completion of two years of college work, a GT score of 110 or higher, a qualifying precommissioning physical examination, and a letter of recommendation from the soldier's unit commander with an endorsement from a field grade officer at the next higher level of command. Certain other specific rules and stipulations apply.

Anyone who is interested should refer to the regulation for further details or contact the ROTC detachment at the college they want to attend.



OFFICER RECRUITING PROGRAM

An important change has been made in the regulations covering the Army's Green to Gold Officer Recruiting Program.

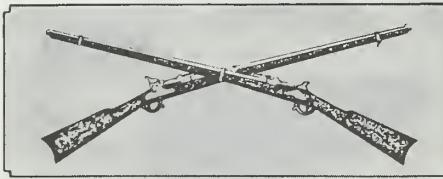
Previously, a soldier had to complete two years on his current enlistment before applying for early release to attend

RETENTION HANDBOOK

The Retention Handbook, developed by MSG Larry Josephs, 88th U.S. Army Reserve Command, Fort Snelling, Minnesota, is being offered to other ARCOMs.

The handbook is designed to give an appointed duty retention NCO a complete step-by-step approach to scheduling interviews and using questionnaires. It also contains a clear format to use in determining a soldier's eligibility for re-enlistment in the Army Reserve.

For further details, anyone who is interested may write to MSG Larry Josephs, 187 E. Mainzer St., West St. Paul, MN 55118, or call him at (612) 457-1739.



OFFICERS CAREER NOTES



UTILIZATION OF LIEUTENANTS

Except in Germany, Korea, and Panama, a commander can expect to have a lieutenant on station for 42 months before he attends an officer advanced course. Currently, a period of 53 months of Active Federal Commissioned Service is required for promotion to captain, which leaves ample time for a junior officer to fulfill many professional development goals, including service as rifle platoon leader, company executive officer, specialty platoon leader, and battalion or brigade staff officer.

Then, from the time a lieutenant's name appears on a promotion roster, it can be as long as 31 months before he actually pins on captain's rank insignia. Meanwhile, there is no reason why a promotable first lieutenant cannot continue serving as a platoon leader or in any other job that requires a lieutenant.

A unit in CONUS (the continental United States) that has a requirement that would keep an officer beyond 42 months should submit a DA Form 4187 requesting his stabilization. The decision will be based on which key position he holds in the battalion or brigade and how long he has served in it. This information will be balanced against the requirement to fill course quotas in the Infantry Officer Advanced Course.

An officer receives assignment instructions approximately six months in advance notifying him of his pending assignment to the advanced course. Once he is in a promotable status, though, he may call Infantry Branch for a tentative assignment date.

CAPTAIN/CVI BOARD

The 1990 Captain/CVI Board begins on 26 February 1990. It will consider

officers with a date of rank from 1 April 1988 through 30 September 1989 for promotion to captain, and will select Reserve officers for continuation on active duty.

In selecting officers for the next higher grade, the board will look at only three items—photographs, Officer Record Briefs (ORBs), and performance microfiche. An officer who is eligible for consideration should go as soon as possible to his local military personnel office (MILPO) to check his ORB and request a copy of his microfiche record.

Infantry Branch sent a letter to each officer in the zone of consideration in October 1989 explaining his responsibilities. Included were a copy of his ORB, a microfiche request form, and the current status of his official photograph.

Although Army Regulation 640-30 says that an officer must submit a photo not later than 60 days after his promotion to first lieutenant, up to 20 percent of the officers whose files were screened by past boards did not have photos in them.

Commanders should ensure that the board sees their officers in the best light by making sure they have good photos in their files.

1990 MAJOR PROMOTION BOARD

The 1990 Army Competitive Category Major Promotion Board is tentatively scheduled to convene on 21 August 1990. Infantry captains in Year Group 1981 will be considered in the promotion zone, Year Group 1982 officers in the below-the-zone category, and Year Group 1980 officers who were not selected by the 1989 board in the above-the-zone category.

Any officers who will be considered needs to request a copy of his performance microfiche early so that he can review it, correct it, and receive a cor-

rected copy before the board convenes.

He should update his official photograph if it will be more than five years old when the board convenes, screen the new photo for quality, and submit it early enough to arrive no later than 15 July 1990.

The official DA message that announces the board dates, zones of consideration, and administrative instructions will be released in late April or early May. The officers affected should contact their military personnel offices in late April for details and should begin working now to get their records and photos up to date.

ADVANCED CIVIL SCHOOLING

During August and September of each year, assignment officers screen the records of officers in a certain year group for advanced civil schooling (ACS). Candidates are selected on the basis of their duty performance, branch qualification status, and their academic background—both discipline and grades—and availability.

Officers are selected for ACS to support the Army's requirements in specific functional areas, in the United States Military Academy Instructor Program, and in other programs that require advanced degrees. Year Group 1984 will be considered next summer for ACS programs that will begin in 1991.

An officer who is not in Year Group 1984 but is available and has enough time to complete 18 to 24 months of advanced civil schooling and a utilization tour of three to four years should contact his assignment officer.

Any officer who is interested in ACS should make sure copies of his undergraduate transcripts are on file at Infantry Branch, and arrange to take the Graduate Record Examination early enough so that the results will be available when his

file is screened.

Further guidance regarding ACS is available in DA Pamphlet 600-3 and AR 621-1, or from Captain McNulty at AUTOVON 221-5520, commercial 703-325-5520.

USAR AT IN GERMANY

Annually, 20 Reserve officers are selected for duty with units in the Federal Republic of Germany (FRG) as part of the joint service Reserve Officer Foreign Exchange Program. The training periods are two to four weeks, during which the emphasis is on hands on, "dirty boot" training.

The ideal participants are lieutenant colonels or majors who have operational experience and who are members of units that have mobilization missions in Europe.

Each year, the U.S. Army Reserve, through Forces Command (FORSCOM), solicits applications from its troop program unit officers. Six primary and three alternate candidates are selected to participate.

Any Army Reserve officers who are

interested should direct their inquiries to U.S. Army Reserve Support Center, ATTN: DARP-NC-TSO, 1815 N. Fort Myer Drive, Arlington, VA 22209-1805; AUTOVON 226-3919 or 202-696-3919.

Commander, PERSCOM, ATTN: TAPC-MSR-S, 200 Stovall Street, Alexandria, VA 22332-0414. Unit personnel administration sections have forms available.

Keeping your officer record brief (ORB) up to date is also critical, because it is used to determine your qualifications and availability. Make sure it includes your home and duty addresses and telephone numbers.

Your local personnel office is responsible for updating the form. Your assignment officer at Infantry Branch is limited in making corrections and will do so only after you have tried to use your MILPO. All corrections must be verified before they can be made on your records.

Make sure all of the documents that may pertain to the assignments you want are current—your transcripts, for example, if you want an ROTC assignment. Note, too, that the newest policy change requires a new photograph at least every five years.

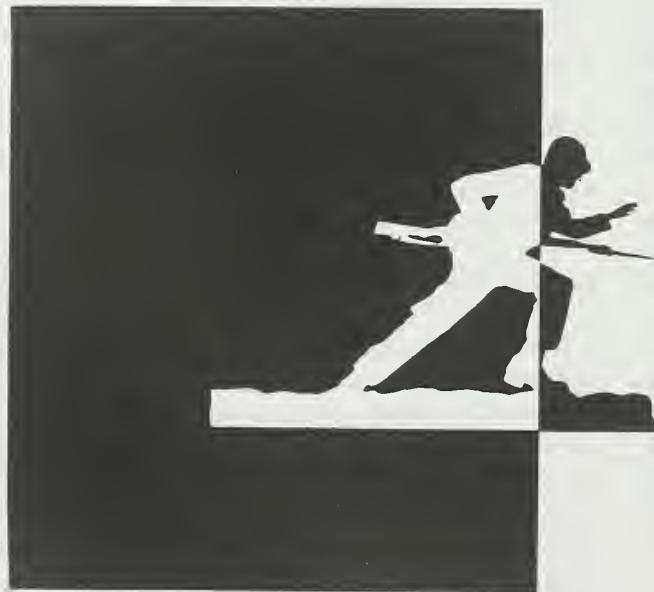
Keeping your assignment officer advised of your preferences won't guarantee that you will get the assignment you most desire, but it will help him place you in the right job in the right place at the right time.

INFLUENCING YOUR ASSIGNMENTS

Assignment officers are responsible for ensuring that the right officer is placed in the right assignment at the right time. Assignment considerations include, among others, the Army's needs, the officer's professional development, and his qualifications and personal desires.

Assignments are normally made six months in advance for CONUS assignments and nine months in advance for assignments outside CONUS. You can assist this process by using your preference statement and officer record brief.

The best way to influence your assignments is to send a DA Form 483 (preference statement) to the proper address every three years, after you arrive at a new duty station, or whenever your preferences change. Send the statement to



BOOK REVIEWS



We have recently received a number of interesting items from the U.S. Superintendent of Documents:

• **THE NONCOMMISSIONED OFFICER IMAGES OF AN ARMY IN ACTION: A PRINT SET.** The 18 prints in this set are reproductions of paintings prepared at the Center of Military History by a group of active duty soldier-artists. (CMH Pub 70-36. USGPO S/N 008-029-00178-1. \$15.00.) The set is dedicated to all noncommissioned officers and to those who aspire to become NCOs with the hope that an increased knowledge of the history of the NCO corps will reinforce their pride in the corps and in the Army which it serves. The prints illustrate how NCOs have trained soldiers, led small units, and carried out a host of other special missions over the past 200 years.

• **AIR FORCE BASES: REFERENCE SERIES, VOLUME I. ACTIVE AIR FORCE BASES WITHIN THE UNITED STATES ON 17 SEPTEMBER 1982.** By Robert Mueller, United States Air Force Historical Research Center. Office of Air Force History, 1989. USGPO S/N 008-070-00627-8. 633 Pages. \$31.00. This volume deals, in a statistical format, with the histories of 89 Air Force bases up to the date shown above, which marked the 75th anniversary of military aviation in the United States. The volume lists the dates of activation, occupancy, closure, and transferral; the units stationed at each installation; the chief support organizations; and the names of the commanders.

• **UNITED STATES ARMY IN THE WORLD WAR, 1917-1919: VOLUME 2, POLICY-FORMING DOCUMENTS OF THE AMERICAN EXPEDITIONARY FORCES** (CMH Pub 23-7, 1989. USGPO S/N 008-029-00180-2. 651 Pages. \$46.00) and **UNITED STATES ARMY IN THE WORLD WAR, 1917-1919: VOLUME 3, TRAINING AND**

USE OF AMERICAN UNITS WITH THE BRITISH AND FRENCH (CMH Pub 23-8, 1989. USGPO S/N 008-029-00188-8. 743 Pages. \$28.00). These are two more volumes in the Army's Center of Military History reprints of a series of volumes on the World War I era. (See **INFANTRY**, November-December 1988, page 48.) These volumes, as the others in the series, were originally published between 1931 and 1949. A total of 17 volumes will make up the complete set. There is a great deal of fascinating material in these volumes, and much that could be considered pertinent today when discussing infantry tactics and techniques.

• **THE HARMON MEMORIAL LECTURES IN MILITARY HISTORY, 1959-1987: A COLLECTION OF THE FIRST THIRTY HARMON LECTURES GIVEN AT THE UNITED STATES AIR FORCE ACADEMY.** Edited by Lieutenant Colonel Harry R. Borowski. Office of Air Force History, 1988. USGPO S/N 008-070-00625-1. 636 Pages. \$31.00. Lieutenant General Hubert R. Harmon was the first superintendent of the U.S. Air Force Academy. He was a strong advocate of the use of military history both to understand the world we live in and to shape its destiny. In 1959, as a tribute to his distinguished career, the Academy started a military history lecture series. This volume consolidates all of the Harmon lectures through 1987; they are arranged by subject—military history, biography and leadership, soldiers and armies, strategy and tactics, military thought and reform, and the military and society. All of this

NOTE TO READERS: All of the books mentioned in this review section may be purchased directly from the publisher or from your nearest book dealer. We do not sell books. We will furnish a publisher's address upon request.

makes for some very fine reading.

• **THE ROLE OF FEDERAL MILITARY FORCES IN DOMESTIC DISORDERS, 1789-1878.** By Robert W. Coakley. Army Historical Series, Center of Military History, 1988. CMH Pub 30-13. USGPO S/N 008-029-00167-5. 372 Pages. \$22.00. This is the first of three projected volumes on the use of federal military forces in domestic disorders within the United States. The author focuses his narrative on the pattern of military intervention in each case, including its legal basis and the way in which the troops were used once they were ordered in. He emphasizes the point that the three volumes—he is currently working on the second one—deal only with the use of military force under federal control. In light of recent events, infantrymen should be aware of this excellent historical work, which relates relevant historical experiences to professional issues of today and tomorrow.

• **AMERICAN MILITARY HISTORY.** Army Historical Series, Center of Military History, 1989. Partially revised edition. First printed in 1969. CMH Pub 30-1. USGPO S/N 008-029-00189-6. 755 Pages. \$35.00. Although this military history was originally planned as a textbook for use in the senior ROTC course, it has proved to be quite popular with other groups. This partially revised edition includes Chapters 1-27 from the 1973 edition and a completely new version of Chapter 28, "The U.S. Army in Vietnam." It also includes a new bibliography as well as a new list of suggested readings and a partially revised index. The Center does plan to bring out, at some future date, a further revised edition to include the many significant events that have taken place since Vietnam.

• **PANAMA: A COUNTRY STUDY.** Fourth Edition. Edited by Sandra W. Meditz and Dennis M. Hanratty. Area

Handbook Series, Library of Congress, 1989. DA Pamphlet 550-46. USGPO S/N 008-020-01170-3. 338 Pages. \$17.00. The information in this volume, one in a continuing series of area handbooks, is current as of December 1987. The volume itself treats in a compact and objective manner the dominant social, political, economic, and military aspects of contemporary Panama. It makes its appearance at a most opportune time.

Contrary to some opinions, the Soviet military forces have not disappeared from the face of the earth. Rather, they still represent a formidable fighting force and it is well that all U.S. infantrymen keep up with the current literature concerning that force. Here are a few of the most recent publications we recommend:

- SOVIET MILITARY POWER, 1989: PROSPECTS FOR CHANGE. Written and produced by the Department of Defense. USGPO S/N 008-000-00538-9. 159 Pages, Softbound. This is an annual publication in a series that began in 1981. It provides an authoritative report on the Soviet Union's military forces and the threat they represent to the United States and its allies.

- SOVIET MILITARY DOCTRINE: CONTINUITY, FORMULATION, AND DISSEMINATION. By Harriet Fast Scott and William F. Scott. Westview Press, 1988. 315 Pages. \$45.00. The authors are among the premier experts on Soviet military affairs in the United States. They argue that "while we should not ignore the possibility of actual change in the Kremlin's goals, we must be realistic about the chance of that happening." And while new slogans have appeared in Soviet writings and proclamations, the authors question how much we can take on trust alone. They also believe "it is improbable that any change will alter the Marxist-Leninist goal of scientific communism: the overthrow of capitalism, which in the final analysis means any nation outside of the Soviet orbit. This objective will remain the basis thrust of Soviet military doctrine."

- RED BANNER: THE SOVIET MILITARY SYSTEM IN PEACE AND WAR. By Christopher Donnelly. Jane's, 1988. 288 Pages. \$52.50. The author of

this book is also recognized as a world-renowned Soviet military expert. In this particular publication he explains how the Soviet military forces have evolved, how they are structured, and what their training and doctrine teaches them about the West—their perceived enemy. His primary concern is with the Soviet soldiers themselves, the human element in the military equation, for, as he says, "It is they whom we must understand; it is they who must be motivated to fight if armed forces are to be more than a collection of ironmongery; and it is they who need knowledge and skill in ever greater quantity and quality. If they fail, then the system fails, no matter how well equipped it is, or how high the level of technology and sophistication."

- CLAWS OF THE BEAR: THE HISTORY OF THE RED ARMY FROM THE REVOLUTION TO THE PRESENT. By Brian Moynahan. A Marc Jaffe Book. Houghton Mifflin, 1989. 468 Pages. \$24.95. The author is the European editor of the *London Sunday Times*. Using mostly secondary sources, bolstered by a number of unpublished ones, and interviews with former members of the Soviet armed forces, he tells his story with considerable verve. The book is divided into three parts—from 1917 to the outbreak of World War II; World War II; and the events from 1945 to the present that have shaped the Soviet armed forces into the fighting force it is today. The author's approach is more the journalist's than the historian's, and his concentration is largely focused on the Soviet Army. His book does not have the same detail as the two mentioned above but it is definitely worth reading.

Many of us tend to forget when we talk today about the Army's future participation in low intensity conflicts that the Army was involved in just such a conflict at the turn of this century. In fact, as one author has written, "the Philippine insurrection of 1899 to 1902 is still the best case study of the American military in a counter-insurgent role." In a recently published book, we are reminded of that conflict—THE U.S. ARMY AND COUNTERINSURGENCY IN THE PHILIPPINE WAR,

1899-1902. By Brian McAllister Linn. The University of North Carolina Press, 1989. 258 Pages. \$34.95.

The author, who was a visiting professor of history at Old Dominion University when he wrote this book, restricts his discussion to the events on the main island of Luzon, which had been divided by the Army for control purposes into four districts. He presumes a certain amount of knowledge on the part of his reader, particularly knowledge of what has been written and said in the past. For example, the Army has been severely criticized by some writers for its supposed brutality in carrying out its pacification campaigns, particularly in southern Luzon.

Although he admits "there were clear instances when Army policies were unnecessarily harsh and when soldiers were guilty of atrocities," he feels that there is "little evidence to support those who believe that the U.S. occupation of the Philippines was little more than an orgy of racism and atrocities. Rather, the Army responded in a wide variety of ways, both successful and unsuccessful, to the differing challenges it faced. It is this diversity, both in the Filipino resistance and the American response, that makes the Philippine War so fascinating."

The book contains many lessons for today's infantrymen, and particularly for those who, at all levels, might lead American soldiers into a low intensity conflict or who might direct a counterinsurgency effort. It is must reading.

We have also received a large number of interesting books on World War II. Here are several we recommend highly:

- BEYOND THE BEACHHEAD: THE 29th INFANTRY DIVISION IN NORMANDY. BY Joseph Balkoski. Stackpole Books, 1989. 320 Pages. \$19.95.

- BATTLES AND BATTLESCENES OF WORLD WAR TWO. By David G. Chandler. Macmillan, 1989. 160 Pages. \$19.95.

- WITS OF WAR: UNOFFICIAL GI HUMOR-HISTORY OF WORLD WAR II. By Edwin J. Swineford. Kilroy Was There Press (Box 5462, Fresno, CA 93704), 1989. 658 Pages. \$19.75,

Softbound.

• AUGUST 1944: THE CAMPAIGN FOR FRANCE. By Robert A. Miller. Presidio Press, 1988. 280 Pages. \$17.95.

• ASSAULT CROSSING: THE RIVER SEINE, 1944. By Ken Ford. Sterling, 1988. 192 Pages. \$19.95.

• THE SECOND WORLD WAR: A COMPLETE HISTORY. By Martin Gilbert. Henry Holt, 1989. 846 Pages. \$29.95.

• RHINELAND: THE BATTLE TO END THE WAR. By W. Denis Whitaker and Shelagh Whitaker. St. Martin's, 1989. 422 Pages. \$24.95.

• ALLIES: GREAT U.S. AND RUSSIAN WORLD WAR II PHOTOGRAPHS. Published by Hugh Lauter Levin Associates. Distributed by MacMillan, 1989. 200 Pages. \$35.00.

• CORREGIDOR: THE ROCK FORCE ASSAULT, 1945. By E.M. Flanagan, Jr. Presidio Press, 1988. 331 Pages. \$18.95.

• THE DOOMED EXPEDITION: THE CAMPAIGN IN NORWAY, 1940. By Jack Adams. A Leo Cooper Book. The Shoe String Press, 1989. 199 Pages. \$29.50.

• ULTRA AND MEDITERRANEAN STRATEGY. By Ralph Bennett. William Morrow, 1989. 496 Pages. \$25.00.,

And here are some of our longer reviews:

JANE'S INFANTRY WEAPONS, 1989-90. 15th Edition. Edited by Ian V. Hogg (Jane's, 1989. 858 Pages. \$170.00).

Once again, infantrymen are urged to read Ian Hogg's Foreword (pages 31-35). In particular, his ideas on the 5.56mm cartridge are provocative and should be the subject of considerable discussion. If he is correct in his beliefs, perhaps we should be giving more thought to this caliber of cartridge for our machineguns. This edition has the usual sections devoted to personal weapons, crew-served weapons, ammunition, and ancillary equipment, plus a set of data tables that permit the making of rapid comparisons. An addenda section updates the main portions of the volume. The last part of the volume contains a table of national inventories, an index of manufacturers, and an alphabetical index. As

we have said in the past, all infantrymen should become familiar with this book's content; the information it contains is invaluable.

THE MILITARY BALANCE, 1989-1990. (Published by Brassey's for the International Institute for Strategic Studies, 1989. 252 Pages. \$35.00, Softbound).

This authoritative annual publication has taken on a new look this year—a striking cover and a somewhat different typographical arrangement on the inside. But its factual presentation of information on the armed forces of the world has not changed, and its premier position among reference handbooks remains unchallenged. With data current as of 1 June 1989, this edition is arranged in the usual manner—one major section is made up of national entries grouped by regions; the other major section contains analytical essays and tables on various subject areas. Of particular interest to infantrymen is the essay in the second section titled "NATO and Warsaw Pact Conventional Forces."

WARTIME: UNDERSTANDING AND BEHAVIOR IN THE SECOND WORLD WAR. By Paul Fussell (Oxford University Press, 1989. 330 Pages. \$19.95. Reviewed by Colonel Rolfe L. Hillman, United States Army Retired.

Paul Fussell's present conviction is that the history of our participation in World War II has been sanitized and romanticized by the sentimental, the loony patriotic, and the ignorant. "America has not yet understood what the Second World War was like...." In this book, he uses a wide range of topics to tell how bad it really was and how, in his view, the general public was propagandized, censored, and shielded.

Fussell was one of Fort Benning's Officer Candidate School graduates in the spring of 1944 and a year later was wounded while leading a rifle platoon in the 103d Infantry Division in France. (In another book, he explains his dark and ironical view of war as being the result of his having become "a speaker who is

really a [highly peeved] infantryman, disguised as a literary and cultural commentator.") From that standpoint, he thoroughly unsanitizes—but not in any particularly new or startling fashion—the experience of the American soldier in and out of combat with, as in his other writings, a peculiar expertise in the matter of bodily dismemberment.

The book contains an absorbing store of reflections on the psychological and emotional atmosphere of the war, but by the end we get a message that Fussell rates the war as not only ridiculous but useless. And that does not sit well with those of us who are in or on the fringes of the loony patriotic.

Paul Fussell emerged from academia to public acclaim with *The Great War and Modern Memory* in 1975, and comparison is inevitable. Well, then, *Wartime* does not do for World War II what *The Great War* did for World War I.

LYNDON JOHNSON'S WAR: THE ROAD TO STALEMATE IN VIETNAM. By Larry Berman (Norton, 1989. 254 Pages. \$18.95). Reviewed by Doctor Joe P. Dunn, Converse College.

The author's earlier book, *Planning a Tragedy: The Americanization of the War in Vietnam* (1982), the account of the decision to take over the war, was a monumental contribution. This sequel is one of the most important books now available on the Vietnam War.

As in the first volume, Berman employs just released materials to get inside the decision making process. The picture he develops is one of great disagreement among the advisors, especially a disillusioned Robert McNamara, and President Johnson caught in a dilemma that became more complex with every passing day. It was a war Johnson could not get out of, yet it was increasingly clear that it could not be won.

President Johnson insisted that this was not "his war," but the evidence contradicts this assertion. He chose to escalate in 1965; he chose to accept the Westmoreland attrition strategy that was the road to stalemate; he chose to try to sneak the war by the American people rather than mobilize the nation for a long,

painful struggle; he chose to play down the costs and lean toward more optimistic scenarios; he chose to hide the anticipated enemy build-up prior to Tet; and he hoped for a miracle to get out with his place in history intact. In sum, as Berman aptly demonstrates, it was Lyndon Johnson's war, and his failure. In the end, he paid the political price.

For all who try to understand the decision making process of the war, this is an essential book.

THE LONG GRAY LINE. By Rick Atkinson (Houghton Mifflin, 1989. \$24.95). Reviewed by Captain Tim Mishkofski, United States Army.

Don't be turned off by the title of this book thinking it is only about West Point and West Pointers. In reality, the story of the U.S. Military Academy's Class of 1966 is the story of the United States Army from the death of John Kennedy to the election of Ronald Reagan.

The author, a newspaper journalist and an Army brat, tells a compassionate, even-handed story of a generation of American youth who came of age on the crest of what has been called the "Pax Americana" only to be savagely brought to earth by a lost war and its aftermath.

The lieutenants that trained at Fort Benning in 1966 had an Infantry war to look forward to and little else. They believed the myths young men must believe to face an unknown enemy. Regardless of the source of their commissions, they felt that successful soldiers needed to see combat early in their careers. They later learned that battles are fought by youths as much because of their unfamiliarity with death as their strength and enthusiasm. For the most part, they fought with courage and honor.

And then Atkinson shows the bill the country had to pay for the war. He tells of the home front as it began to berate the Army in the immediate post-war years for taking part in a lost war. He covers the Army of the 1970s in great detail, thoughtfully and objectively.

This book certainly caused me to examine my motives for becoming a soldier. It hurt my heart, but it made me proud. As George Crocker put it—he was

a member of that West Point Class of 1966—"This is a low ebb. You have to have faith. While the Army may be down now, it's just temporary. The Army is one of the great, enduring institutions. It is one of the things that has held us together as a nation. It will rebound. There are better days ahead."

To me, this book is a tribute to those soldiers who stuck it out in those dark days of drugs and black lights, regardless of whether they went to West Point or to a night school taught in a motor pool.

MARCHING OVER AFRICA: LETTERS FROM VICTORIAN SOLDIERS. By Frank Emery (David and Charles, 1986. 204 Pages. \$29.95). Reviewed by Captain Harold E. Raugh, Jr., United States Army.

The enlisted British soldiers in Queen Victoria's army were, according to Rudyard Kipling, "foul-mouthed, godless, and utterly careless of their duties to wives and children." But Frank Emery shows this stereotype to be false and unrealistic.

A multitude of military campaigns were conducted by the British Army during Victoria's long reign, many in Africa. Emery adroitly uses a number of letters from soldiers to show the activities, thoughts, and feelings of those men who took part in the Abyssinian campaign (1868), Ashanti War (1873), Zulu War (1879), 1st Boer War (1880-1881), and campaigns in Egypt and the Sudan between 1882 to 1898.

Contrary to popular belief, soldiers in the ranks were fairly well-educated and for the author, the letters bring "unexpected credit to the ordinary soldier for his powers of expression." The soldiers' descriptions of blood, sweat, and tears prove that combat is much more than an emotionless affair between anonymous automatons.

Three maps illustrate the various African campaigns as do sketches of military life by participants and by contemporary newspaper illustrations. The "Sources" (seven pages) are quite informative and interesting, but the bibliography is markedly sparse.

This is an interesting, thought-

provoking, and well written book, although its price is a bit high. The reader will be rewarded, however, with not only an enthralling chronicle of Victorian military campaigning in Africa but, more importantly, with a greater insight into the thoughts, feelings, and concerns of the soldiers in the ranks—an army's most valuable asset.

RECENT AND RECOMMENDED

CRY COMANCHE: THE 2nd U.S. CAVALRY IN TEXAS, 1855-1861. By Harold B. Simpson. Hill College Press (P.O. Box 619, Hillsboro, TX 76645), 1988. 186 Pages. \$15.00.

BAYONETS IN THE STREETS: THE USE OF TROOPS IN CIVIL DISTURBANCES. 2d Revised Edition. Edited by Robin Higham. Sunflower University Press (1531 Yuma, Box 1009, Manhattan, KS 66502-4228), 1989. 268 Pages. \$11.95. Softbound.

BATTLE FOR WHITE RUSSIA: THE DESTRUCTION OF ARMY GROUP CENTER, JUNE 1944. By Gerd Niepold. Translated by Richard Simpkin. Original German edition published in 1985. Brassey's, 1987. 287 Pages. \$48.00

PANZER COMMANDER: THE MEMOIRS OF COLONEL HANS VON LUCK. By Hans von Luck. Praeger, 1989. 301 Pages. \$24.95.

MAKERS OF THE UNITED STATES AIR FORCE. An AFA Book. Edited by John L. Frisbee. Pergamon-Brassey's, 1989. 347 Pages. \$25.01.

THE AMERICAN FIELD SERVICE ARCHIVES OF WORLD WAR I, 1914-1917. Compiled by L. D. Geller. Bibliographies and Indexes in World History, Number 16. Greenwood Press, 1989. 144 Pages. \$49.95.

CARRIER WARS: NAVAL AVIATION FROM WORLD WAR II TO THE PERSIAN GULF. By Edwin P. Hoyt. McGraw-Hill, 1989. 274 Pages. \$19.95.

STRENGTH FOR THE FIGHT: A HISTORY OF BLACK AMERICANS IN THE MILITARY. By Bernard C. Nalty. The Free Press, 1986. 424 Pages. \$22.50.

CLANDESTINE WARFARE: WEAPONS AND EQUIPMENT OF THE SOE AND OSS. By James Ladd and Keith Melton. Sterling, 1988. 159 Pages. \$24.95.

VICTIMS AND SURVIVORS: DISPLACED PERSONS AND OTHER WAR VICTIMS IN VIETNAM, 1954-1975. By Louis A Wiesner. Contributions to the Study of World History, Number 14. Greenwood Press, 1988. 448 Pages.

HIGH ROAD, LOW ROAD: DIPLOMACY AND PUBLIC ACTIONS IN SOVIET FOREIGN POLICY. By Gerhard Wettig. Pergamon, 1989. 164 Pages. \$28.00.

RETHINKING NUCLEAR STRATEGY. By Stephen J. Cimbala. Scholarly Resources, 1988. 278 Pages. \$40.00.

U.S. NATIONAL SECURITY POLICY AND STRATEGY: DOCUMENTS AND POLICY PROPOSALS. By Sam C. Sarkesian and Robert A. Vitas, Greenwood Press, 1988. 440 Pages.

From The Editor

1989 INDEX

Our 1989 index has been prepared separately and is available to anyone who requests a copy. We also have a number of our back indexes available free of charge. Please send your requests to Editor, INFANTRY, P.O. Box 2005, Fort Benning, GA 31905-0605.

SUBSCRIPTION RENEWALS

Just recently, we mailed to a number of our paid subscribers expiration notices that contained the wrong subscription rates. This was particularly true for those subscribers whose subscriptions expired with our November-December 1989 and January-February 1990 issues. Our correct subscription rates are shown below. We apologize to those subscribers for any problems this may have caused them.

HOT LINE

The Infantry School maintains a hot line for military callers for around-the-clock contact with the field. If you have a general question, or a question dealing with a specific training program, or if you have something of an immediate nature to pass on, the number to call is AUTOVON 835-7693, commercial (404) 545-7693.

If you have a lengthy question or comment, please send it in writing to Commandant, USAIS, ATTN: ATSH-IP, Fort Benning, GA 31905-5452.

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